ICD-BM1/BM1PRO

SERVICE MANUAL

US Model

Ver 1.0 2003. 11

SPECIFICATIONS

Recording media “Memory Stick”, Monaural recording

Recording time

Maximum recording time and number of messages for a “Memory Stick”

The maximum recording time for all the folders and the maximum number of messages are as follows. You can record messages for the maximum recording time in a single folder.

	4MB	8MB	16MB	32MB	64MB	128MB
ST*	10min.	20min.	40min.	1hr 25min.	2hr 50min.	5hr 50min.
SP**	30min.	1hr	2hr 10min.	4hr 20min.	8hr 50min.	17hr 45min.
LP***	1hr 20min.	2hr 50min.	5hr 45min.	11hr 45min.	23hr 35min.	47hr 25min.
Number of Messages	456	950	963	1,016	1,016	1,016

*ST: High quality recording mode (hr: hours /min.: minutes)
(stereo sound with an external stereo microphone not supplied)
**SP: Standard play recording mode (monaural sound)
***LP: Long play recording mode (monaural sound)

Frequency range	ST: 60 Hz - 13,500 Hz SP: 60 Hz - 7,000 Hz LP: 80 Hz - 3,500 Hz
Speaker	approx. 28 mm (29/32 in.) dia.
Power output	350 mW
Input/Output	• Earphone jack (minijack) for 8 - 300 ohms ear receiver/headphones • Microphone jack (minijack, stereo) Plug in power Minimum input level: 0.7 mV 3 kilohms or lower impedance microphone • USB connector • DC IN 3V jack
Playback speed control	+100% to -50% (DPC)
Power requirements	Two size AAA (LR03) alkaline batteries: 3 V DC
Dimensions	36.6 × 112.3 × 21mm (1 1/2 × 4 1/2 × 27/32 in.) (w/h/d) (not incl. projecting parts and controls)
Mass	98 g (3.5 oz) (incl. batteries and a “Memory Stick”)
Supplied accessories	“Memory Stick” (ICD-BM1: 16MB × 1/ ICD-BM1PRO: 16MB × 3) “Digital Voice Editor” (CD-ROM) × 1 Ear receiver × 1 USB connecting cable × 1 Carrying case × 1

Design and specifications are subject to change without notice.

IC RECORDER

9-961-405-01
2003K04-1
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Personal Audio Company
Published by Sony Engineering Corporation

SONY®

Flexible Circuit Board Repairing

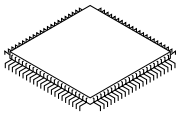
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on Chip Component Replacement

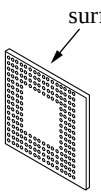
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

* Replacement of IC601, IC702 used in this set requires a special tool.
- The voltage and waveform of CSP (chip size package) cannot be measured, because its lead layout is different from that of conventional IC.

- Lead layouts



Lead layout of conventional IC



CSP (chip size package)

● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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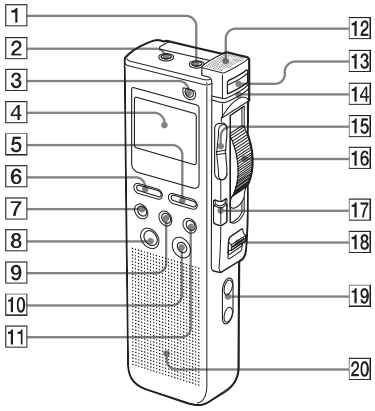
SECTION 1
GENERAL

This section is extracted from instruction manual.

Index to Parts and Controls

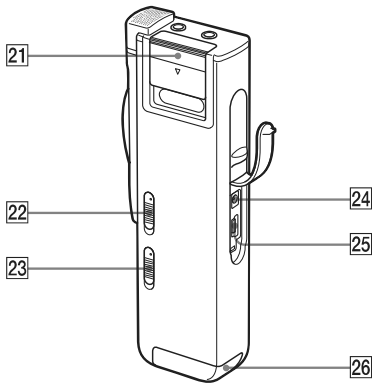
Refer to the pages indicated in parentheses for details.

Front



1 MIC (microphone) (PLUG IN POWER) jack (18)
2 ∩ (headphones) jack (16, 19, 21)
3 ERASE button (29, 34)
4 Display window (24)
5 MENU button (49)
6 DISPLAY button (26)
7 FOLDER button (13, 20)
8 ENTER button
9 DIVIDE button
10 CANCEL button
11 PRIORITY button (36)
12 Built-in microphone (14)
13 NEW FILE button (15)
14 OPR (operation) indicator (14, 21)
15 Jog lever ⏮ (review/fast backward)/⏭ (cue/fast forward)
16 Control key REC (record) / STOP/PLAY/B.SPACE
17 DPC switch (22, 39)
18 POWER ON/OFF switch (8, 13)
19 VOL (volume) +/– buttons (21)
20 Speaker

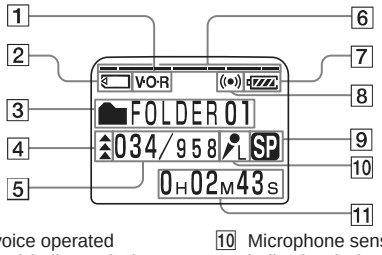
Rear



21 Memory Stick slot cover (10)
22 MIC SENS (microphone sensitivity) switch (17)
CONF(H) (conference, high)/DICT(L) (dictation, low)
23 VOR (voice operated recording) ON/OFF switch (16)
24 DC IN 3V jack (6)
25 USB connector (52)
26 Battery compartment (6)

Using the Display Window

Parts in the display window



1 VOR (voice operated recording) indicator (16)
2 "Memory Stick" indicator
3 Folder indication (13, 20)
Displays the current folder.
4 Priority marks (36)
5 Selected message number / Total message number in the folder (14, 20)
6 Remaining memory indicator (17)
7 Remaining battery indicator (7)
When the AC power adaptor (not supplied) is connected, the indicator does not appear.
8 Alarm indicator (45)
Appears when the alarm is set for a message.
9 Recording mode indication (50)
• ST: High quality recording mode (stereo sound with an external stereo microphone not supplied)
• SP: Standard play recording mode (monaural sound)
• LP: Long play recording mode (monaural sound)
10 Microphone sensitivity indication (17)
Displays the current microphone sensitivity setting with the MIC SENS (microphone sensitivity) switch:
• H (high): CONF(H) position is selected to record at a meeting or in a quiet/spacious place.
• L (low): DICT(L) position is selected to record for dictation.
11 Counter /Remaining time indication /Recording date and time indication / Message name indication/ Current time indication (26, 27)
The display selected with the DISPLAY button appears.

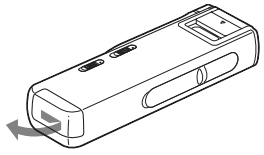
Note

The effect of the back light of the display window may be reduced in a bright location.

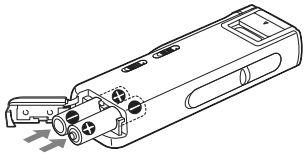
▶*Getting Started*

Step 1: Installing the Batteries

1 Slide and lift the battery compartment lid.



2 Insert two LR03 (size AAA) alkaline batteries with correct polarity, and close the lid.



Clock setting display appears when you insert batteries for the first time or after the unit has been without batteries for a certain period of time. Please refer to steps 3 to 6 in "Step 2: Setting the Clock" on pages 8 and 9 to set the date and time.

Using on house current

Connect the AC power adaptor AC-E30HG (not supplied) to the DC IN 3V jack of the unit and to the wall outlet. Do not use any other AC power adaptor.

Polarity of the plug

Replacing the Batteries

The battery indicator on the display window shows the battery condition.

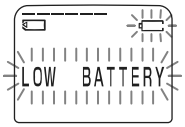
Notes

- Do not use manganese batteries for this unit.
- When you replace the batteries, insert the new ones within 3 minutes after you remove the exhausted ones. Otherwise, the display may show the clock setting or incorrect date and time when you re-insert the batteries. In this case, set the date and time again. The recorded messages and alarm setting, however, will remain.
- Do not charge dry batteries.
- When you are not going to use the unit for a long time, remove the batteries to prevent damage from battery leakage and corrosion.

Battery remain indication

: Replace both of the two batteries with new ones.

: The "LOW BATTERY" is displayed and the unit will stop operation.



Battery life (Using Sony alkaline batteries LR03 (SG))

(Recording mode:)	ST	SP	LP
In continuous recording:	Approx. 11 hours	Approx. 14 hours	Approx. 16 hours
In continuous playback*:	Approx. 6.5 hours	Approx. 7.5 hours	Approx. 8.5 hours

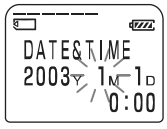
* When playing back through the internal speaker with the medium volume level

* The battery life may shorten depending on the operation of the unit.

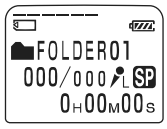
4 **Press ENTER.**
The date and time setting window is displayed. The year digits will flash.

5 **Set the date and time.**

① Press the jog lever up or down (▶▶I/I◀◀) to select the digits of the year.
② Press ENTER.
The month digit will flash.
③ Set the month, day, and the time in sequence, then press ENTER.
The menu mode will be displayed again.



6 **Press MENU.**
The window will return to the normal display.



To cancel the operation

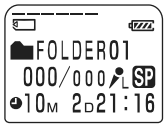
Press CANCEL to return to the previous step of the operations.

To display the current time

Press ENTER while the unit is in the stop mode (page 27).
The current time will be displayed for three seconds.

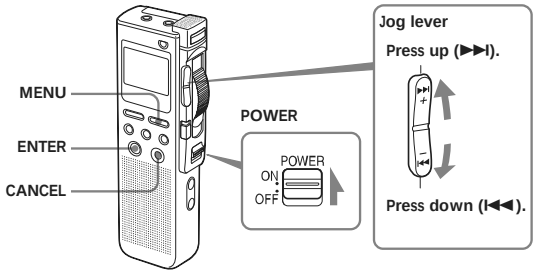
Note

When no "Memory Stick" is inserted or the power is turned off, the current time will not be displayed.

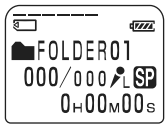


Step 2: Setting the Clock

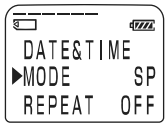
You need to set the clock to use the alarm function or record the date and time.
Clock setting display appears when you insert battery for the first time, or when you insert battery after the unit has been without battery for a certain period of time. In this case, proceed from step 4.



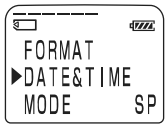
1 **Slide POWER to ON.**
The IC recorder is turned on.



2 **Press MENU.**
The menu mode will be displayed in the display window.



3 **Press the jog lever up or down (▶▶I/I◀◀) to select "DATE&TIME".**

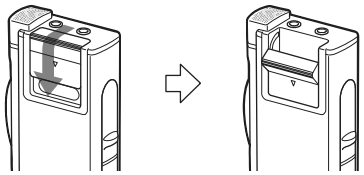


Step 3: Inserting a "Memory Stick" into the IC Recorder

Notes

- Make sure to insert or remove the "Memory Stick" while the unit is turned off.
- Never remove the "Memory Stick" while the unit is accessing the "Memory Stick". (The OPR indicator flashes in orange.)

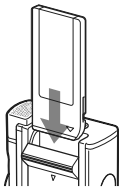
1 **Slide and open the "Memory Stick" slot cover.**



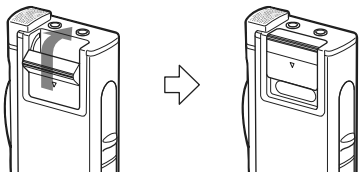
2 **Insert a "Memory Stick" into the "Memory Stick" slot with the terminal side facing inside the recorder. Insert it firmly until it clicks into place.**

Note

Do not insert a "Memory Stick" in a different direction. It may cause malfunction of the unit.

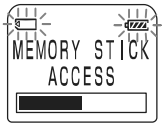


3 **Close the "Memory Stick" slot cover.**



Note on the "ACCESS" message

The unit is accessing data while "MEMORY STICK ACCESS" appears in the display window or the OPR indicator flashes in orange. While accessing, do not remove the "Memory Stick", batteries, or the AC adaptor (not supplied). Doing so may damage the data.

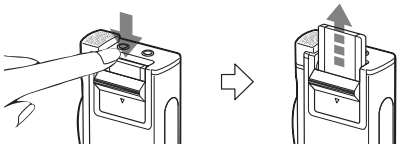


Notes

- The unit starts accessing the data after it is turned on.
- If the unit is required to process excessive amount of data, "MEMORY STICK ACCESS" may be displayed for an extended period of time. This is not a malfunction of the unit. Wait until the message disappears.

Removing the "Memory Stick"

Make sure that "MEMORY STICK ACCESS" disappears, and turn off the unit. Then open the "Memory Stick" slot cover and push the "Memory Stick" into the slot, so that the "Memory Stick" pops out.
Remove the "Memory Stick" from the slot as shown below.



The types of "Memory Stick" you can use with this IC Recorder

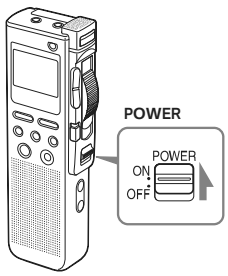
You can also use the following "Memory Stick" of a 4 MB to 128 MB capacity instead of the supplied "Memory Stick". The maximum recording time varies depending on the capacity of the "Memory Stick".

- "Memory Stick"
- "Memory Stick (with memory select function)" (incorporating two 128MB memory units)
- "MagicGate Memory Stick"
- "Memory Stick Duo" (when inserted into the "Memory Stick Duo" adaptor)

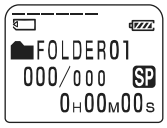
Notes

- The unit does not support the "Memory Stick PRO".
- "MagicGate" is a copyright protection technology that uses an encryption technology. This unit does not support the MagicGate standard, and therefore, recorded data using this unit is not subject to the protection of copyrights by MagicGate.

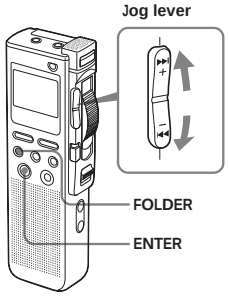
1 Turn on the power.



Slide POWER to ON.

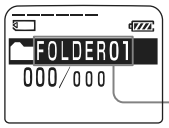


2 Select the folder.



① **Press FOLDER.**

② **Press the jog lever up or down (▶▶I/I◀◀) to display the folder in which you wish to record messages.**



③ **Press ENTER to select the folder.**
To cancel the selection, press CANCEL.
To add a new folder, see page 33.

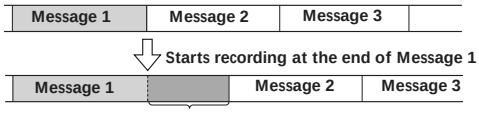
Continued

Recording Messages

You can record messages in each (initially named FOLDER01, FOLDER02, and FOLDER03) folder. The maximum number of recordable messages differs depending on the "Memory Stick" capacity.
You can record messages using the following three functions:

- Add a recording to a previously recorded message (next page)
- Add a recording as a new message (page 15)
- Add an overwrite recording (page 15)

This section explains how to add a recording to a previously recorded message.



Added recording (counted as a part of Message1)

Maximum recording time and number of messages for a "Memory Stick"

The maximum recording time for all the folders and the maximum number of messages are as follows. You can record messages for the maximum recording time in a single folder.

	4MB	8MB	16MB	32MB	64MB	128MB
ST*	10min.	20min.	40min.	1hr 25min.	2hr 50min.	5hr 50min.
SP**	30min.	1hr	2hr 10min.	4hr 20min.	8hr 50min.	17hr 45min.
LP***	1hr 20min.	2hr 50min.	5hr 45min.	11hr 45min.	23hr 35min.	47hr 25min.
Number of Messages	456	950	963	1,016	1,016	1,016

*ST: High quality recording mode (hr: hours /min.: minutes)
(stereo sound with an external stereo microphone not supplied)
**SP: Standard play recording mode (monaural sound)
***LP: Long play recording mode (monaural sound)

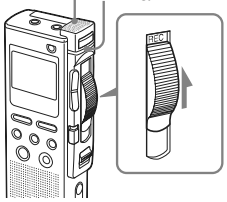
Notes

- For switching the recording mode, see page 50.
- Before making a long recording, be sure to check the battery indicator (page 7).
- The maximum recording time and the number of messages you can make vary depending on the conditions of use.
- To avoid replacing batteries during long recordings, use the AC power adaptor (not supplied).

3 Start recording.

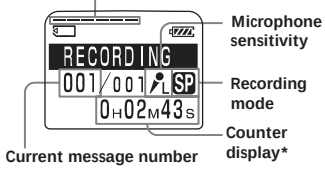
Built-in microphone

OPR indicator (lights in red during recording)



① **Slide the control key to REC.**

Remaining memory



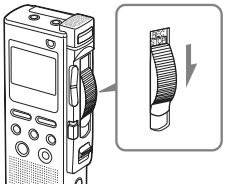
② **Speak into the built-in microphone.**

* The display selected with the DISPLAY button (page 26) appears.

Notes

- While the OPR indicator flashes or when it turns orange, do not remove the "Memory Stick", the batteries or the AC adaptor (not supplied). Doing so may damage the data.
- Noise may be recorded if an object, such as your finger, etc., accidentally rubs or scratches the unit during recording.

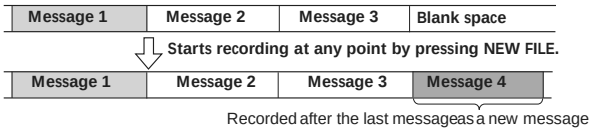
4 Stop recording.



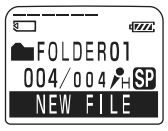
Slide the control key to STOP.
The unit stops at the end of the current recording.
If you do not change the folder after you stop recording, the next time you record you will record from the end of the current recording. The added recording will be counted as part of the current message.

Recording as a New Message

You can add a recording as a new message after the last message in the folder.

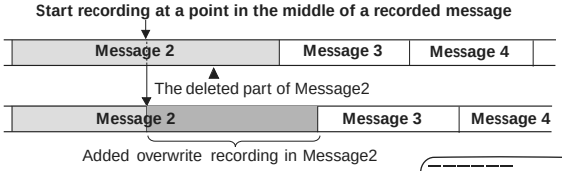


Before you start recording in step 3 on the previous page, press NEW FILE.
"NEW FILE" will be displayed.
Then slide the control key to REC to start a new recording as the last message in the folder.



Adding an Overwrite Recording

When you start recording at a point in the middle of a recorded message, you add an overwrite recording after the selected point.



Locate the point where you want to start recording (page 21) and then slide the control key to REC.
"ADD REC" will be displayed and you can add an overwrite recording to the current message.

Tips

- You can select the overwrite recording mode using the menu (page 41).
- The overwrite recording will be added in the same recording mode as the original message, regardless of the current recording mode setting.

Note

Playback after the overwrite recording starts from the beginning of the message. Playback after a stop starts from the point where you stopped playback.

Continued

Using Convenient Functions while Recording

Reviewing the recording

Slide the control key to B.SPACE. You can search backwards while listening to fast playback sound. After you slide the control key to PLAY, playback starts from that point. You can add an overwrite recording from that point.

Monitoring the recording

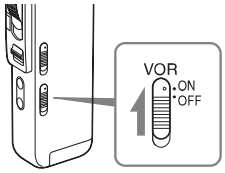
When recording, you can connect an ear receiver supplied or not supplied to the ∩ (headphones) jack and monitor the recording from the connected ear receiver. You can adjust the volume with VOL +/–, but the recording level is fixed.

Note

If you turn up the volume excessively or place the ear receiver near the microphone while monitoring recording, the microphone may pick up the sound from the ear receiver, causing acoustic feedback (howling sound).

Starting recording automatically in response to the sound — Advanced VOR function

Slide the VOR (voice operated recording) switch to ON during stop or recording mode.
Set the control key to REC. Recording starts when the unit detects sound, and "VOR" appears in the display window. The recording pauses when no sound is detected, and "VOR PAUSE" appears.



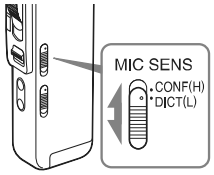
Notes

- Recording will not be started unless the control key is set to REC.
- VOR function is affected by the sound around you. Set the MIC SENS (microphone sensitivity) switch according to the recording conditions. If recording is not satisfactory after you have changed the microphone sensitivity, or for important recording, set the VOR switch to OFF.

Selecting the microphone sensitivity

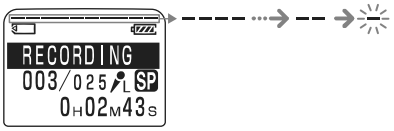
Slide the MIC SENS (microphone sensitivity) switch during stop or recording mode according to the recording conditions:

- CONF(H) (high): To record a small sound at a conference or in a quiet and/or spacious place.
- DICT(L) (low): To record for dictation.

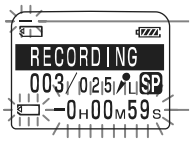


Using the memory remain indication

During recording, the remaining memory indicator decreases one by one. When the remaining recording time reaches 5 minutes, the remaining memory indication flashes.



When the remaining time reaches 1 minute, the remaining time indication will flash in the display window regardless of the display mode (page 26).



Memory indicator flashes.

Remain time indication flashes.

When the memory is full, recording automatically stops and "NO MEMORY SPACE" will be displayed with an alarm sound. Please slide the control key to STOP.
To continue recording, erase some of the messages (page 28) or replace the "Memory Stick".

Note

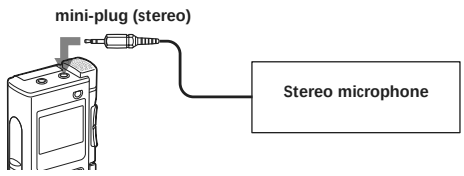
When you set the BEEP (page 51) to OFF, an alarm sound (beep) does not sound.

Recording with an External Microphone or Other Equipment

You can record sound of an external microphone or other equipment (tape recorder, MiniDisc player, or etc.) with the IC recorder. Depending on the device you use, connect the IC recorder as follows. For available accessories, consult with your nearest Sony dealer.

Recording with an External Stereo Microphone

Connect an external stereo microphone to the MIC (microphone) jack. You can enjoy the stereo recording by using a stereo microphone.



When you connect an external microphone, the built-in microphone is automatically cut off. When a plug in power type microphone is connected, power is automatically supplied to the microphone from the IC recorder.

☞ ***Recommended types of microphones***

You can use the ECM-DS70P Sony electret condenser microphone (not supplied).

Note

Before you start the stereo recording with an external stereo microphone, set MODE to ST in the menu (page 50).

Recording from Other Equipment

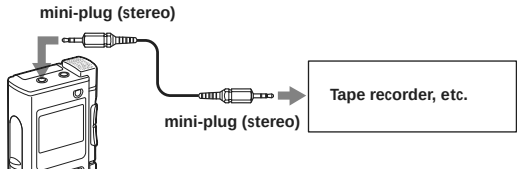
To record sound of other equipment with the IC recorder, connect the MIC (microphone) jack of the IC recorder to the earphone jack of other equipment (tape recorder etc.) by using an audio connecting cable.

Notes

- When the audio recording level is large, sound may be recorded interrupted if you use an audio connecting cable without register. Use a registered audio connecting cable.
- When the audio recording level is small, do not use a registered audio connecting cable.

Recording with Other Equipment

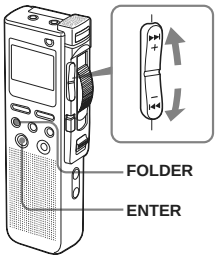
To record the sound of the IC recorder with other equipment, connect the ∩ (headphones) jack of the IC recorder to the audio input connector (minijack, stereo) of other equipment.



Playing Back Messages

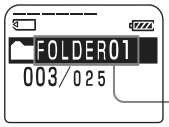
When playing back a previously recorded message, start from Step 1. When playing back a message you have just finished recording, start from Step 3.

1 Select the folder.



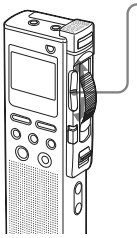
① **Press FOLDER.**

② **Press the jog lever up or down (▶▶I/I◀◀) to display the folder containing the message you want to play back.**

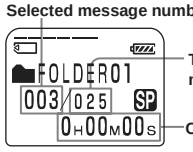


③ **Press ENTER to select the folder.**
To cancel the selection, press CANCEL.

2 Select the message number.



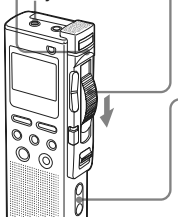
Press the jog lever up or down (▶▶I/I◀◀) to display the desired message number.
Press up (▶▶I): for next message number.
Press down (I◀◀): for previous message number.



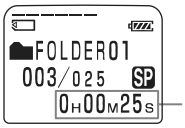
* The display selected with the DISPLAY button (page 26) appears.

3 Start playback.

OPR indicator
(lights in green during playback)
∩ jack



① **Slide the control key to PLAY.**



② **Adjust the volume with VOL +/– .**

* The display selected with the DISPLAY button (page 26) appears.

The unit plays back all the messages in a folder continuously. At the end of each message, a beep will sound.

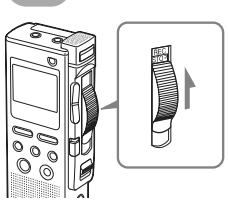
When the unit reaches to the end of the last message in a folder, "MSG END" will flash 3 times with a beep and playback stops. Move the control key to STOP.

☞ ***To listen from an ear receiver***
Connect the supplied ear receiver to the ∩ (headphones) jack. The built-in speaker will be automatically disconnected.

☞ ***To listen from an external speaker***
Connect an active or passive speaker (not supplied) to the ∩ (headphones) jack.

Note
Playback after the overwrite recording starts from the beginning of the message. Playback after a stop starts from the point where you stopped playback.

4 Stop playback.



Slide the control key to STOP.
The unit stops at the current position. (When the unit reaches to the end of the last message in step 3, it stops at the end of the last message.)
You can start an overwrite recording from the point (page 15).

Continued

Playing Back Messages (continued)

Other operations

To	Do this
go back to the beginning of the current message*	Press the jog lever down (I◀◀) once.**
go back to previous messages*	Press the jog lever down (I◀◀) repeatedly. (During stop mode, keep the button pressed to go back the messages continuously.)**
skip to the next message*	Press the jog lever up (▶▶I) once.***
skip to the succeeding messages*	Press the jog lever up (▶▶I) repeatedly.***

* These operations are for when EASY-S is set to OFF. For operations when EASY-S is set to ON, see page 51.
** If you do these operations at the beginning of the first message in a folder during stop mode, the unit locates the end of the last message.
*** If you do these operations at the end of the last message in a folder during stop mode, the unit locates the beginning of the first message.

Playing back a message rapidly or slowly in natural tone — DPC (Digital Pitch Control)

When you adjust the playback speed with the DPC in the menu (pages 39 and 40), you can play back a message rapidly or slowing by sliding the DPC switch to ON. When you set the playback speed faster or slower of the normal speed, "FAST PLAY" or "SLOW PLAY" appears. You can change the setting during playback.

Searching forward/backward during playback (Cue/Review)

- **To search forward:** Keep pressing the jog lever up (▶▶I) during playback and release it at the point you wish to resume playback.
- **To search backward:** Slide the control key to B.SPACE or keep pressing the jog lever down (I◀◀) during playback and release it at the point you wish to resume playback.

The unit searches at slow speed (unit of 4 seconds) with playback sound. It is useful to check one word forward or behind. Then, if you keep pressing the jog lever up or down, the unit starts to search at higher speed. Release it at the point you want to resume playback.

☞ ***When you play back to the end of the last message***

When the unit locates the end of the last message, “MSG. END” flashes 3 times with a beep and the OPR indicator lights in green.

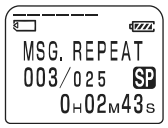
- When “MOVE CONTROL KEY TO STOP POSITION” appears, slide the control key to STOP. The unit will stop at the end of the last message.
- To go back to the beginning of the first message in a folder during stop mode, press the jog lever up (▶▶I).
- If you slide the control key to B.SPACE or keep pressing the jog lever down (I◀◀), the messages are played back rapidly, and normal playback will start at the point you release the button.
- If the last message is long and you wish to start playback at a later part of the message, keep pressing the jog lever up (▶▶I) to go to the end of the message and then press the jog lever down (I◀◀) to go back to the desired point.

Quickly locating the point at which you wish to start playback (Easy Search)

When EASY-S is set to ON (page 51) in the menu, you can quickly locate the point you wish to start playback by pressing the jog lever up or down (▶▶I/I◀◀) repeatedly during playback.
You can go back approximately 3 seconds by pressing the jog lever down (I◀◀) once, or advance approximately 10 seconds by pressing the jog lever up (▶▶I) once. This function is useful when locating a desired point in a long recording.

Playing back a message repeatedly — Repeat Play

When REPEAT is set to ON in the menu (page 50), you can play back a message repeatedly.
Slide the control key to PLAY. “MSG.REPEAT“ will be displayed and the selected message will be played back repeatedly.
To stop playback, slide the control key to STOP.
To resume normal playback, set REPEAT to OFF in the menu.

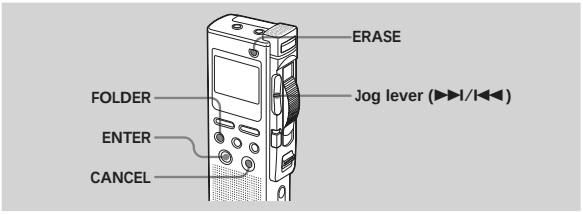


Erasing Messages

You can erase the recorded messages one by one or all messages in a folder at a time.

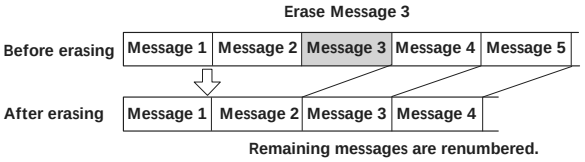
Note

Once a recording has been erased, you cannot retrieve it.

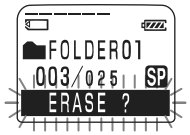


Erasing Messages one by one

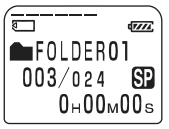
Be sure to erase unnecessary messages only.
When a message is erased, the remaining messages will advance and be renumbered so that there will be no space between messages.



1 **Press ERASE while playing back the message you want to erase or press ERASE for more than 1 second during stop mode.**
“ERASE?” will flash while the first and last 5 seconds of the message are played back 10 times.



2 **Press ENTER while the message is being played back and “ERASE” is flashing.**
The message is erased and the remaining messages will be renumbered. (For example, if you erase Message 3, Message 4 will be renumbered as Message 3. When erasing is completed, the unit will stop at the current position.)



To cancel erasing
Press CANCEL before step 2.

To erase other messages
Repeat steps 1 and 2.

To erase a message partially
First divide the message (see page 31) and then follow the steps on this page to erase the message.

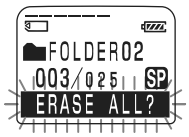
Continued

Erasing All Messages in a Folder

You can erase all recorded messages in a folder.

1 **Select the folder containing the messages you want to erase.**
For information on selecting a folder, see step 2 of "Recording Messages" on page 13.

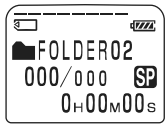
2 **While pressing FOLDER, press ERASE for more than 1 second.**
“ERASE ALL?” will flash for 10 seconds.



If no messages are recorded in a folder
“ERASE FOLDER?” will flash and you can erase the folder itself (see page 34).

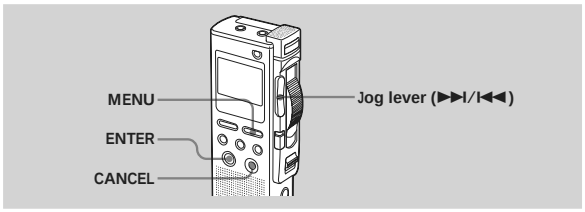
3 **While “ERASE ALL?” is flashing, press ENTER.**
All the recorded messages contained in the folder are erased. The folder itself will not be deleted. For how to erase a folder, see page 34.

To cancel erasing
Press CANCEL before step 3.



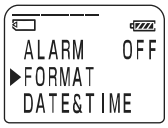
Formatting a “Memory Stick“

You can format a “Memory Stick“ using the Memory Stick IC Recorder. Formatting will delete all data recorded in the “Memory Stick“ including images and other data. Before formatting, check the data in the “Memory Stick“.
Because a commercially available “Memory Stick“ has already been formatted at the factory, you do not need to format a “Memory Stick“ before the first use.
The supplied “Memory Stick“ has also already been formatted.



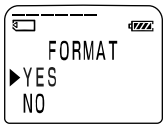
1 **Press MENU.**
The menu mode will be displayed.

2 **Press the jog lever up or down (▶▶I/I◀◀) to select “FORMAT”.**



3 **Press ENTER.**
The formatting window will be displayed.

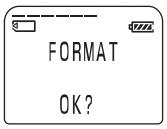
4 **Press the jog lever up or down (▶▶I/I◀◀) to select "YES".**



Continued

Formatting a “Memory Stick“ (continued)

5 **Press ENTER.**
“OK?” will be displayed in the display window.



6 **Press ENTER again.**
Formatting starts.
“FORMATTING” will be displayed on the display.
After formatting, the display in step 2 will appear in the display window.

7 **Press MENU to exit the menu mode.**
The window will return to the normal display.
After formatting, three folders are automatically made in the “Memory Stick“ (This is the same after inserting a “Memory Stick“ for the first time.)

To cancel formatting

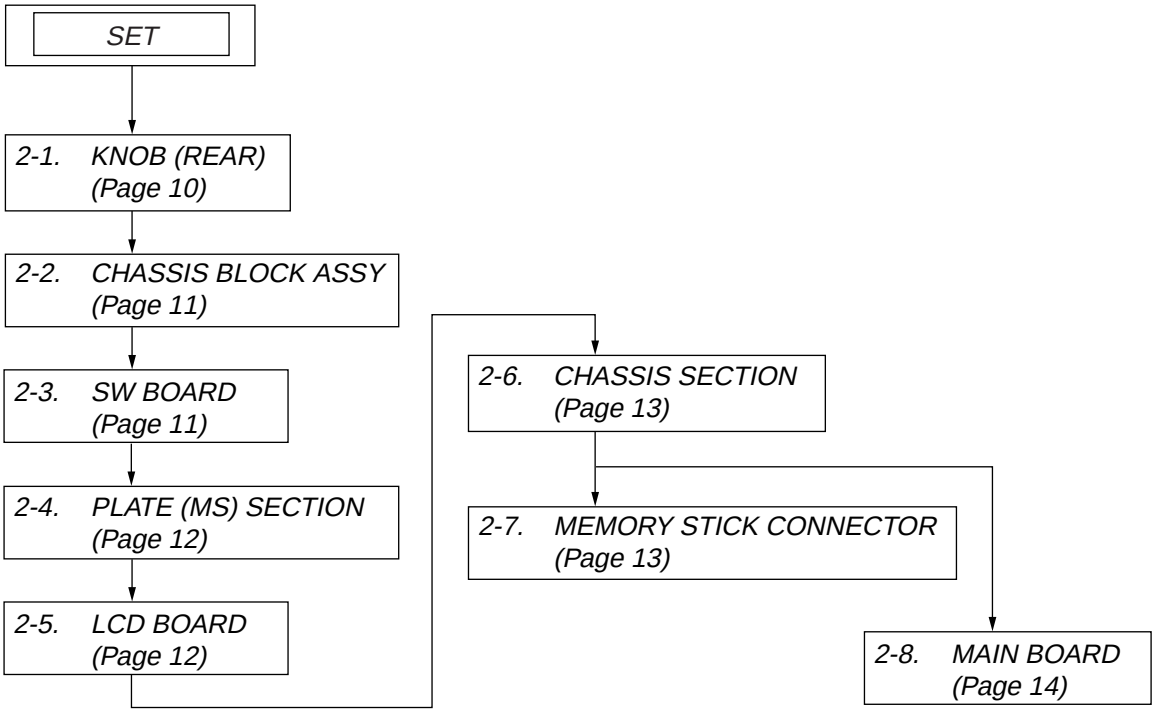
Select “NO“ in the step 4 or press CANCEL while “OK ?“ is displayed in step 5.

Note

You cannot format when the write-protect switch on the “Memory Stick“ is set to “LOCK”.

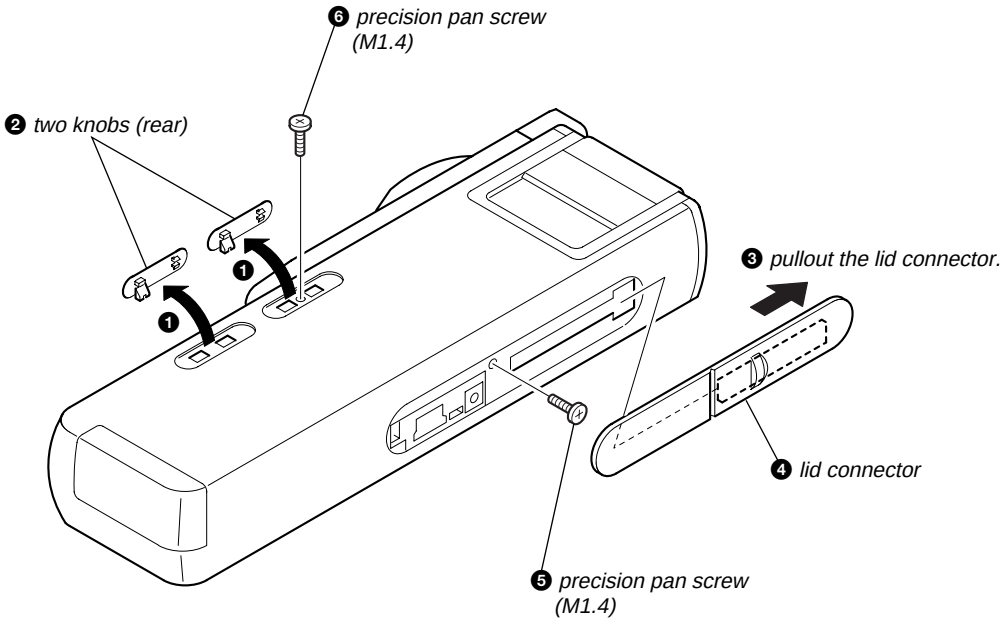
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

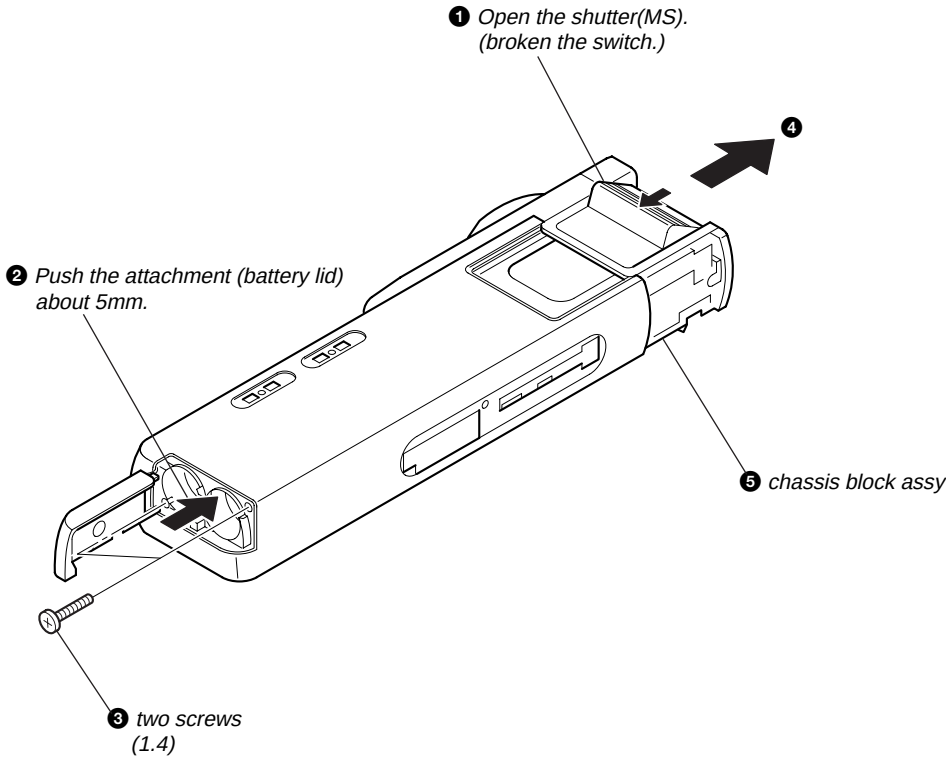

SET
2-1. KNOB (REAR) (Page 10)
2-2. CHASSIS BLOCK ASSY (Page 11)
2-3. SW BOARD (Page 11)
2-4. PLATE (MS) SECTION (Page 12)
2-5. LCD BOARD (Page 12)
2-6. CHASSIS SECTION (Page 13)
2-7. MEMORY STICK CONNECTOR (Page 13)
2-8. MAIN BOARD (Page 14)

Note : Follow the disassembly procedure in the numerical order given.

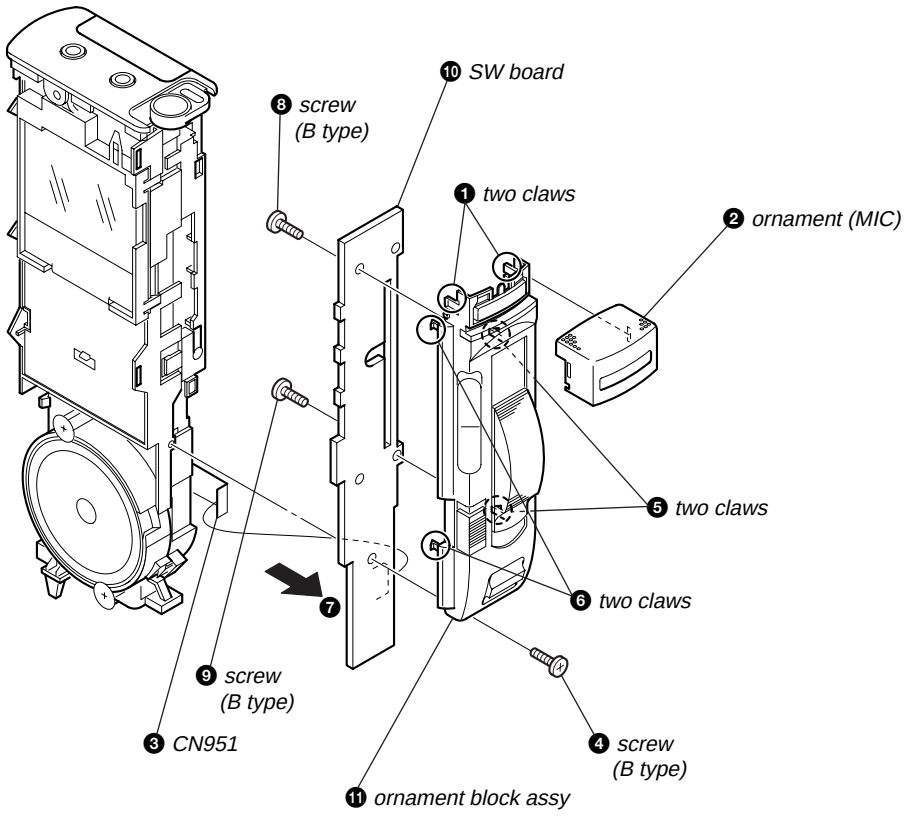
2-1. KNOB (REAR)



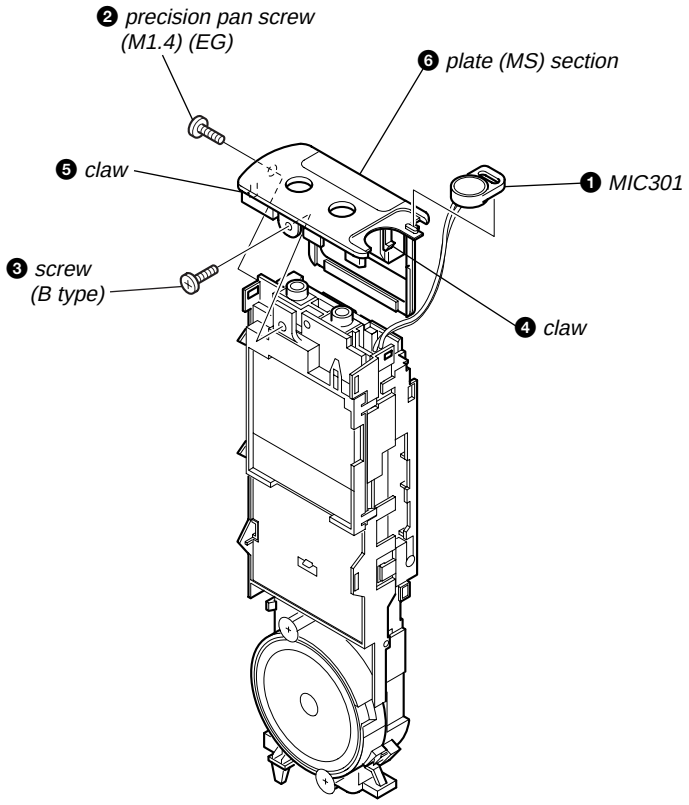
2-2. CHASSIS BLOCK ASSY



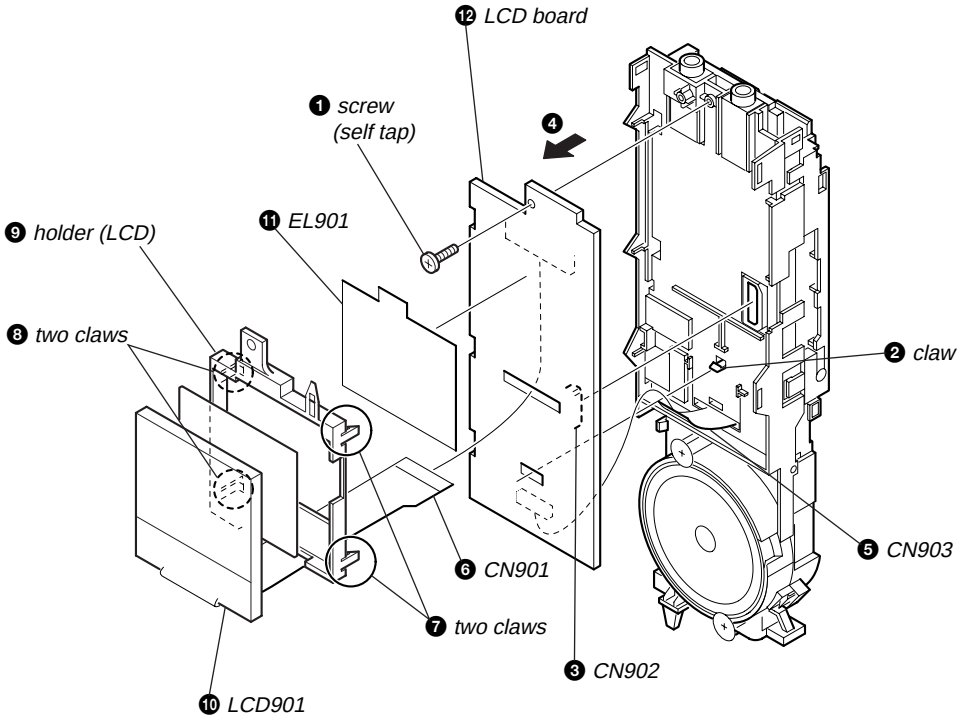
2-3. SW BOARD



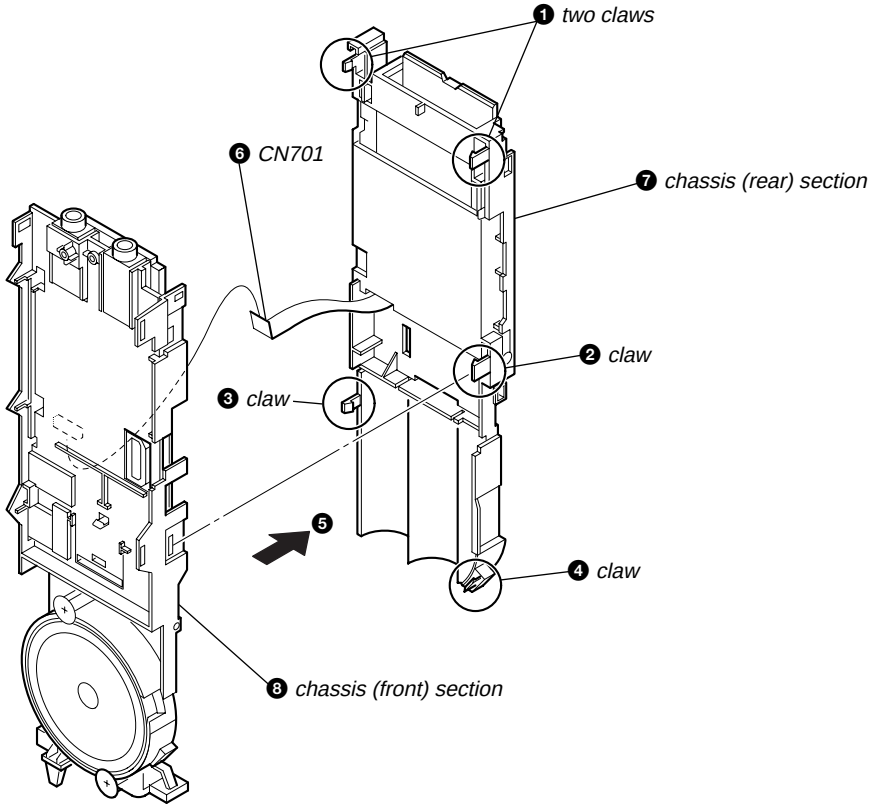
2-4. PLATE (MS) SECTION



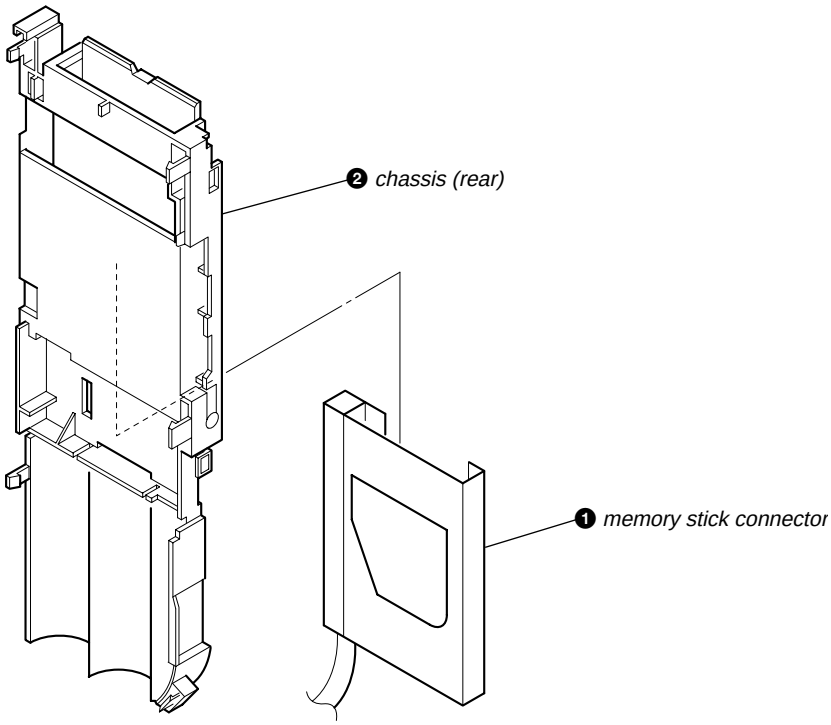
2-5. LCD BOARD



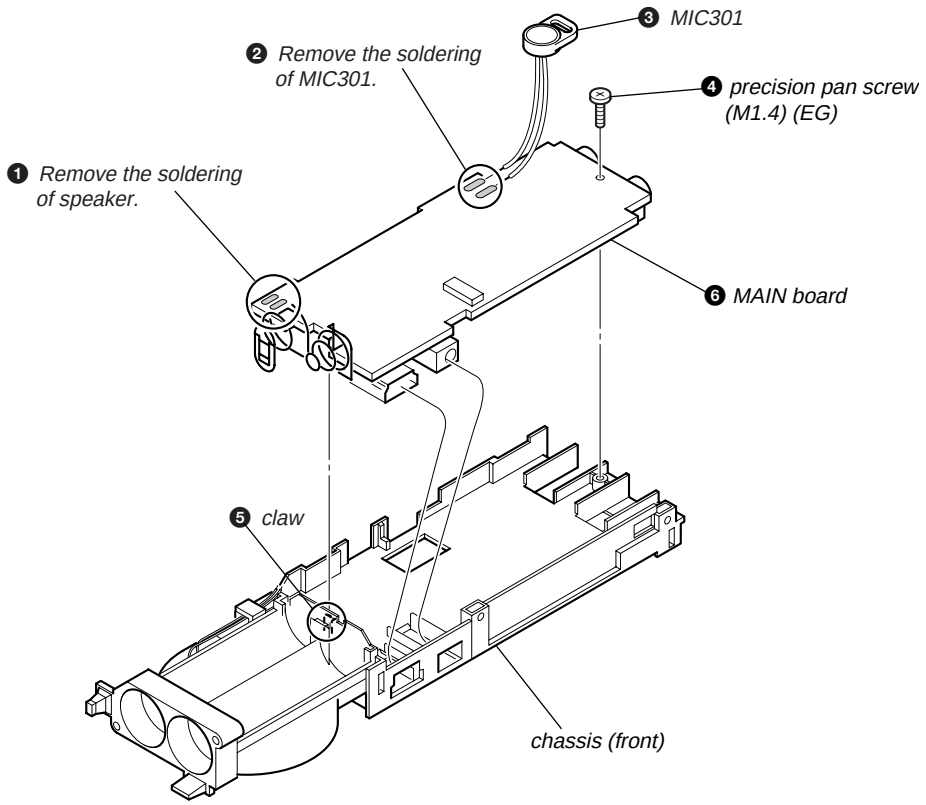
2-6. CHASSIS SECTION



2-7. MEMORY STICK CONNECTOR



2-8. MAIN BOARD



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC601 µPD77213F1-101-DA2 (DSP) (MAIN BOARD)

Pin No.	Pin Name	I/O	Pin Description
1 to 3	NC	—	Not used
4	EVDD	—	I/O power supply (3.0 V)
5	XADACS	O	AD/DA chip select
6	ADACCLK	I/O	AD/DA clock
7	ADACDTI	I	AD/DA data input
8	ADACDTO	O	AD/DA data output
9	MICPWR	O	Microphone power supply control
10	GND	—	GND
11	XFMWP	O	Boot flash ROM write protect
12	XFMCS	O	Boot flash ROM chip select
13	MICSENSE	O	Microphone sensitivity select (H: Conference, L: Dictation)
14	GND	—	GND
15	NC	—	Not used
16	EVDD	—	I/O power supply (3.0 V)
17	HD1	I/O	Host data bus (Not used)
18	HD2	I/O	Host data bus (Not used)
19	HD0	I/O	Host data bus (Not used)
20	HD3	I/O	Host data bus (Not used)
21	HD5	I/O	Host data bus (Not used)
22	HD4	I/O	Host data bus (Not used)
23	GND	—	GND
24	IVDD	—	Core power supply (1.5 V)
25	HD7	I/O	Host data bus (Not used)
26	HD6	I/O	Host data bus (Not used)
27	GND	—	GND
28	EVDD	—	I/O power supply (3.0 V)
29	XHCS	I	Host chip select (Pull-up)
30	HA1	I	Host data access 1 (Pull-down)
31	XHWR	I	Host write (Pull-up)
32	HA0	I	Host data access 0 (Pull-down)
33	XHRD	I	Host read (Pull-up)
34	TIMOUT	O	Not used
35	SO	O	Serial data output
36	XHWE	O	Host write enable (Not used)
37	XHRE	O	Host read enable (Not used)
38	GND	—	GND
39	EVDD	—	I/O power supply (3.0 V)
40	BCLK	I/O	Bit clock
41 to 44	NC	—	Not used
45	ADASI	I	ADA serial data input
46	MCLK	I	Master clock
47	LRCLK	I/O	Clock for L-ch and R-ch (H: L-ch, L: R-ch)
48	TSO	O	Time sharing serial data output
49	TSCK	I	Time sharing serial clock input
50	TSOEN	I	Time sharing serial output enable
51	GND	—	GND
52	TSI	I	Time sharing serial data input
53	TSIAK	I	Time sharing serial input response (Not used)
54	TSORQ	O	Time sharing serial output request (Not used)
55	TSIEN	I	Time sharing serial input enable

Pin No.	Pin Name	I/O	Pin Description
56	EVDD	—	I/O power supply (3.0 V)
57	MA1	O	Memory address bus 1 (Not used)
58	MA0	O	Memory address bus 0 (Not used)
59	GND	—	GND
60	IVDD	—	Core power supply (1.5 V)
61	MA2	O	Memory address bus 2 (Not used)
62	MA4	O	Memory address bus 4 (Not used)
63	GND	—	GND
64	MA3	O	Memory address bus 3 (Not used)
65	MA7	O	Memory address bus 7 (Not used)
66	MA5	O	Memory address bus 5 (Not used)
67	MA8	O	Memory address bus 8 (Not used)
68	MA6	O	Memory address bus 6 (Not used)
69	MA9	O	Memory address bus 9 (Not used)
70	MA10	O	Memory address 10 (Not used)
71	GND	—	GND
72	EVDD	—	I/O power supply (3.0 V)
73	MA11	O	Memory address 11 (Not used)
74	MA12	O	Memory address 12 (Not used)
75	MA14	O	Memory address 14 (Not used)
76	MA13	O	Memory address 13 (Not used)
77	MA16	O	Memory address 16 (Not used)
78	MA15	O	Memory address 15 (Not used)
79	EVDD	—	I/O power supply (3.0 V)
80	MA17	O	Memory address 17 (Not used)
81 to 84	NC	—	Not used
85	EVDD	—	I/O power supply (3.0 V)
86	MA18	O	Memory address 18 (Not used)
87	MA19	O	Memory address 19 (Not used)
88	XMHOLDAK	O	Memory bus hold response (Not used)
89	XMRD	O	Memory read-out (Not used)
90	XMHOLDRQ	I	Memory bus hold request (Pull-up)
91	GND	—	GND
92	EVDD	—	I/O power supply (3.0 V)
93	XMWAIT	I	Memory access weight (Pull-up)
94	XMWR	O	Memory write (Not used)
95	GND	—	GND
96	IVDD	—	Core power supply (1.5 V)
97	XMBSTB	O	Memory bus strobe (Not used)
98	MD0	I/O	Memory data bus (Not used)
99	GND	—	GND
100	MD3	I/O	Memory data bus (Not used)
101	MD1	I/O	Memory data bus (Not used)
102	MD4	I/O	Memory data bus (Not used)
103	MD5	I/O	Memory data bus (Not used)
104	MD6	I/O	Memory data bus (Not used)
105	MD2	I/O	Memory data bus (Not used)
106	MD8	I/O	Memory data bus (Not used)
107	GND	—	GND
108	EVDD	—	I/O power supply (3.0 V)
109	MD7	I/O	Memory data bus (Not used)
110	MD13	I/O	Memory data bus (Not used)

Pin No.	Pin Name	I/O	Pin Description
111	MD10	I/O	Memory data bus (Not used)
112	MD11	I/O	Memory data bus (Not used)
113	MD9	I/O	Memory data bus (Not used)
114	MD14	I/O	Memory data bus (Not used)
115	GND	—	GND
116	MD15	I/O	Memory data bus (Not used)
117	MD12	I/O	Memory data bus (Not used)
118	TICE	O	Test ICE
119	TMS	I	Test mode selection
120	EVDD	—	I/O power supply (3.0 V)
121	GND	—	GND
122	TDO	O	Test data output
123 to 126	NC	—	Not used
127	XTRST	I	Test reset
128	TCK	I	Test clock input
129	EVDD	—	I/O power supply (3.0 V)
130	IC	—	Internal connection (Not used)
131	TDI	I	Test data input
132	STOPS	O	Stop (Open)
133	CSTOP	I	Clear stop mode (Pull-down)
134	IC	—	Internal connection (Not used)
135	GND	—	GND
136 and 137	PLL0, PLL1	I	PLL rate setting 0 and 1
138	XRST	I	Reset
139	GND	—	GND
140	IVDD	—	Core power supply (1.5 V)
141	PLL3	I	PLL rate setting 3
142	HALTS	O	HALT
143	GND	—	GND
144 and 145	IVDD	—	Core power supply (1.5 V)
146	PLL2	I	PLL rate setting 2
147	GND	—	GND
148	EVDD	—	I/O power supply (3.0 V)
149	CLKOUT	O	Clock output
150	CLKIN	I	Clock input
151	BOOT1	I	Boot mode 1 (fixed at “H”)
152	GND	—	GND
153	BOOT3	I	Boot mode 3 (fixed at “H”)
154	BOOT0	I	Boot mode 0 (fixed at “H”)
155	GND	—	GND
156	BOOT2	I	Boot mode 2 (fixed at “H”)
157	FMSCK	I/O	Boot flash ROM serial clock
158	TSIOEN	I	SIO enable
159	REQ	O	Request
160	FMSDIO	I/O	Boot flash ROM serial data
161 to 164	NC	—	Not used

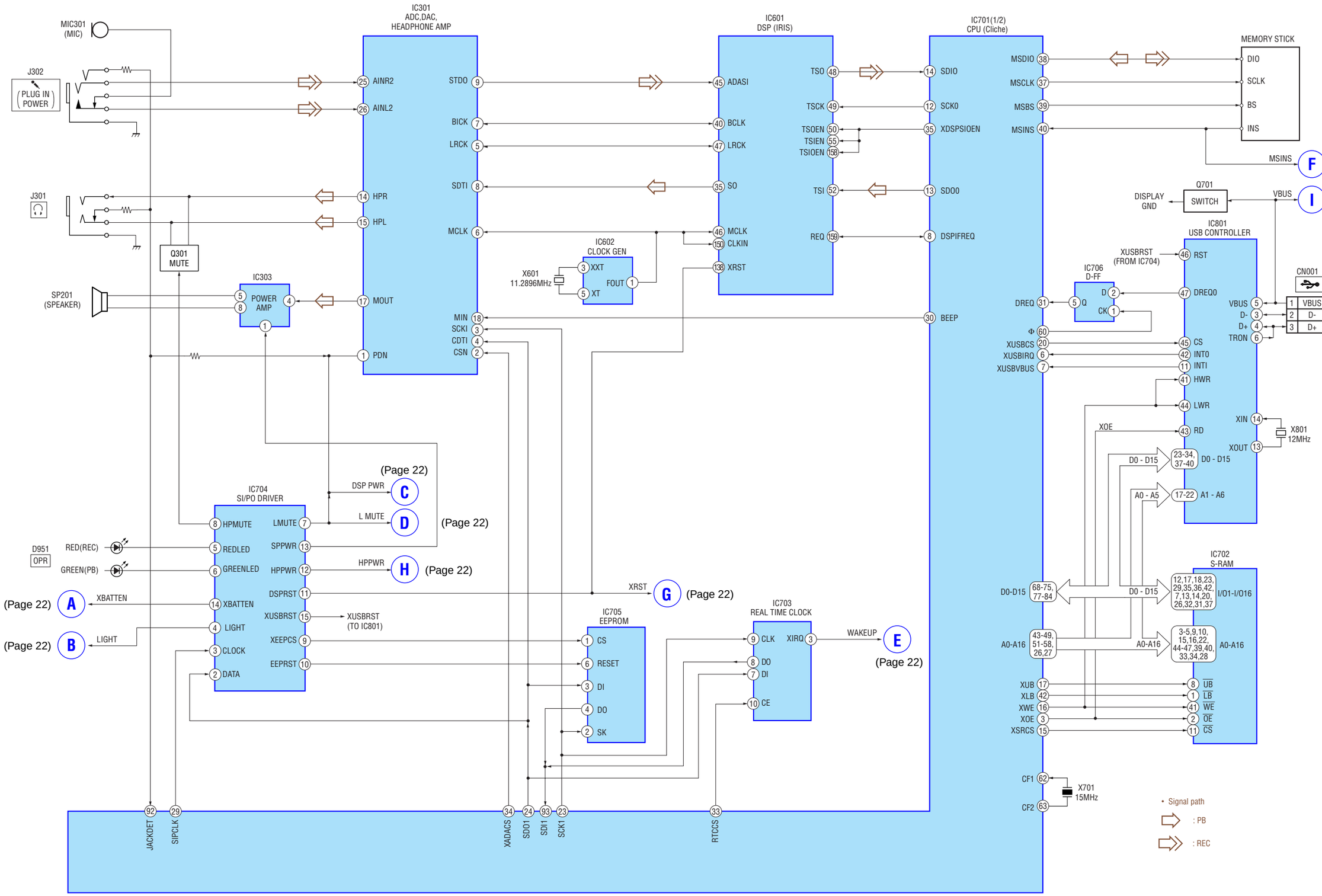
• IC701 LC67F5006A-F3A15-E (CPU) (MAIN BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	GND
2	DSPPWR	O	DSP power supply control
3	XOE	O	SRAM output enable, USB read strobe
4	WAKEUP	I	KEY WAKE UP interrupt
5	XDCINDET	I	DC IN detection
6	XUSBIRQ	I	USB driver interrupt request (Not used)
7	XUSBVBUS	I	USB VBUS power supply control
8	DSPIFREQ	I	DSP I/F interrupt request
9	RXD	I	Serial data input (Not used)
10	VSS	—	GND
11	TXD	O	Serial data output (Not used)
12	SCK0	O	Serial clock for DSP I/F
13	SDO0	O	Serial data output for DSP I/F
14	SDI0	I	Serial data input for DSP I/F
15	XSRCS	O	SRAM chip select
16	XWE	O	SRAM write enable
17	XUB	O	Higher byte enable for SRAM
18	XLCDCS	O	Chip select for LCD driver I/F
19	CIVDD	—	I/O power supply 3.1 V
20	XUSBCS	O	Chip select for USB (Not used)
21	LCDSCK	O	Serial clock for LCD driver I/F
22	LCDDO	O	Serial data output for LCD driver I/F
23	SCK1	O	Serial clock for RTC and EEPROM
24	SDO1	O	Serial data output for RTC, S/P and EEPROM
25	XLCDRST	O	LCD reset
26 and 27	A15, A16	O	SRAM address bus
28	CCVDD	—	Core power supply 2.6 V
29	SIPCLK	O	Clock for S/P
30	BEEP	O	Beep
31	DREQ	I	USB DMA request input
32	POWERSW	I	POWER switch detection
33	RTCCS	O	Chip select for RTC
34	XADACS	O	Chip select for A/D & D/A converter
35	XDSPSIOEN	O	DSP I/F SIO enable
36	MSLOCK	I	OPEN/CLOSE switch detection
37	MSCLK	O	Clock for Memory Stick
38	MSDIO	I/O	Serial data for Memory Stick
39	MSBS	O	BS for Memory Stick
40	MSINS	I	INS for Memory Stick
41	CIVDD	—	I/O power supply 3.1 V
42	XLB	O	SRAM lower byte enable
43 to 48	A0_A5	O	SRAM and USB address bus
49	A6	O	SRAM address bus
50	VSS	—	GND
51 to 58	A7_A14	O	SRAM address bus
59	CCVDD	—	Core power supply 2.6 V
60	ø	O	System clock output
61	CIVDD	—	I/O power supply 3.1 V
62	CF1	I	CF oscillator pin
63	CF2	O	CF oscillator pin
64	VSS	—	GND

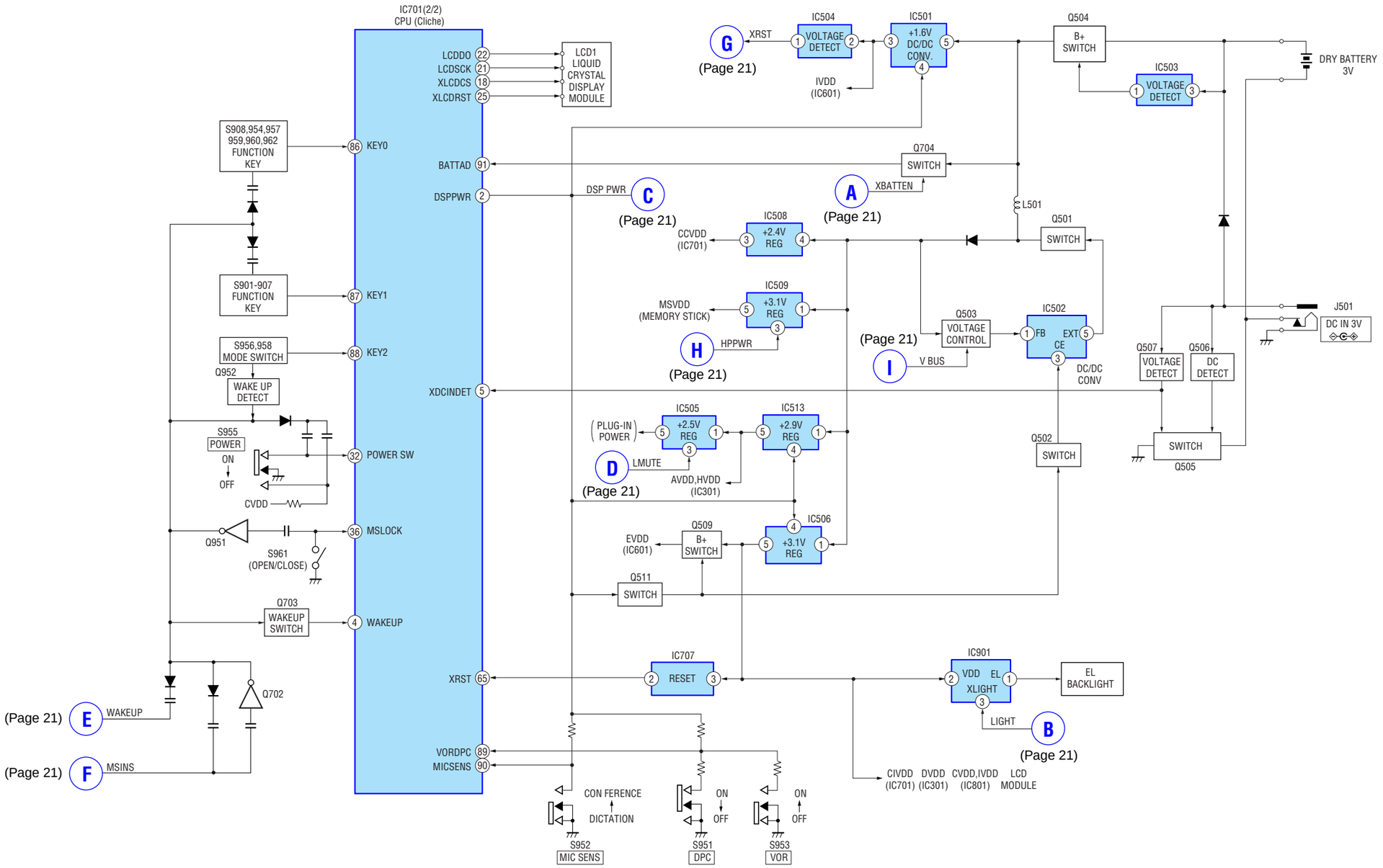
Pin No.	Pin Name	I/O	Pin Description
65	XRST	I	Reset input (L: Reset)
66	XSTBY	I	Standby (L: HW standby)
67	BOOT	I	Boot pin, not used. (set at “L”)
68 to 75	D0_D7	I/O	SRAM and USB data bus
76	Vss	—	GND
77 to 84	D8_D15	I/O	SRAM and USB data bus
85	AVss	—	GND for A/D
86 to 88	KE0, KEY1, KEY2	I	Key entry 0, 1, and 2
89	VORDPC	I	VOR & DPC switch detection
90	MICSENS	I	MIC SENS switch detection
91	BATTAD	I	Battery voltage detection
92	JACKDET	I	Microphone & headphone jack detection
93	SDI1	I	Serial data input for RTC and EEPROM
94	VREF	I	Reference voltage for A/D (3.1 V)
95	AVcc	I	Power supply for A/D (3.1 V)
96 to 98	MD0_MD2	I	Mode pin
99	TEST	I	Test pin
100	CCVDD	—	Core power supply 2.6 V

MEMO

3-2. BLOCK DIAGRAM — MAIN SECTION —



3-3. BLOCK DIAGRAM — LCD/SW SECTION —



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

Common Note on Schematic Diagrams:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- ▬ : B+ Line.
- Power voltage is dc 3V and fed with regulated dc power supply from battery terminal.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : PB
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : PB
  ⇨ : REC

∗ IC601, IC702 on main board are not replaceable.

- The voltages and Waveform of CSP (chip size package) cannot be measured, because its lead layout is different from that of conventional IC.

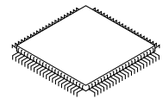
Common Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ● : Through hole.
- ▬ : Pattern from the side which enables seeing.

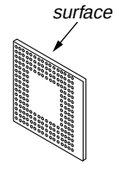
Caution:	
Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.

∗ IC601, IC702 on main board are not replaceable.

- Lead Layouts

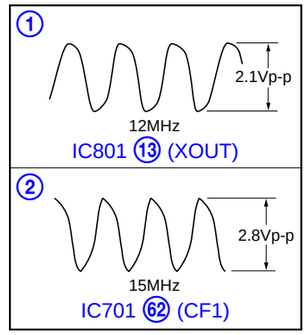


Lead layout of conventional IC



CSP (chip size package)

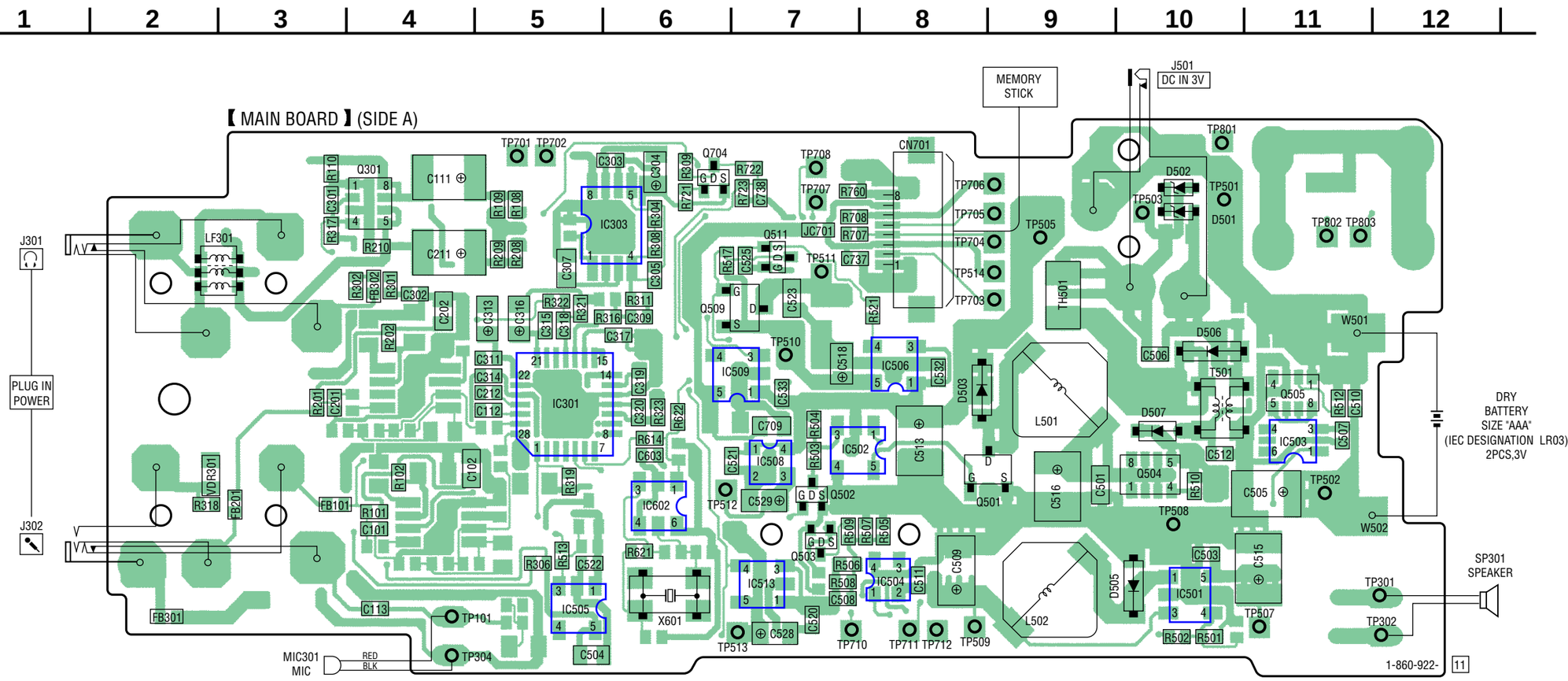
- **Waveforms**



23

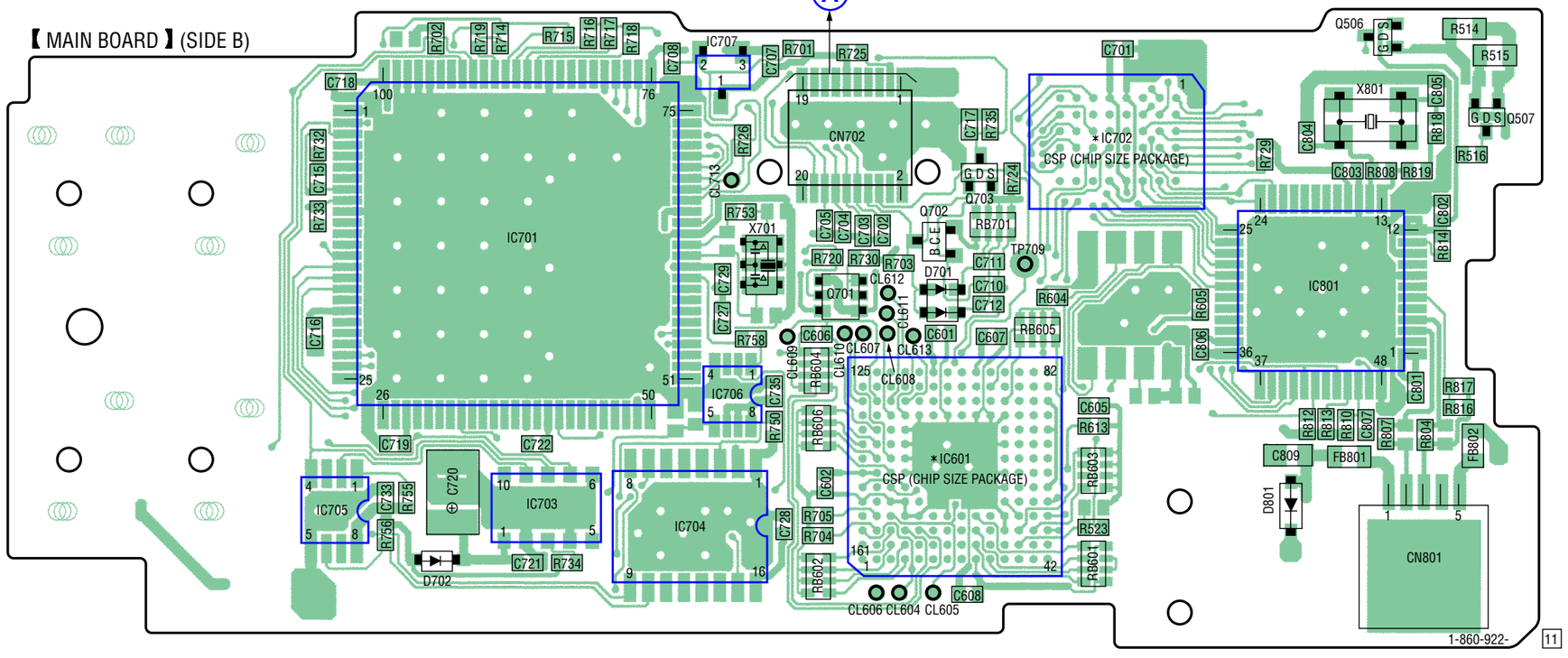
3-4. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 23 for Common Note on Printed Wiring Boards. : Uses unleaded solder.

【 MAIN BOARD 】(SIDE A)



(Page 29)
LCD BOARD
CN902
A

【 MAIN BOARD 】(SIDE B)

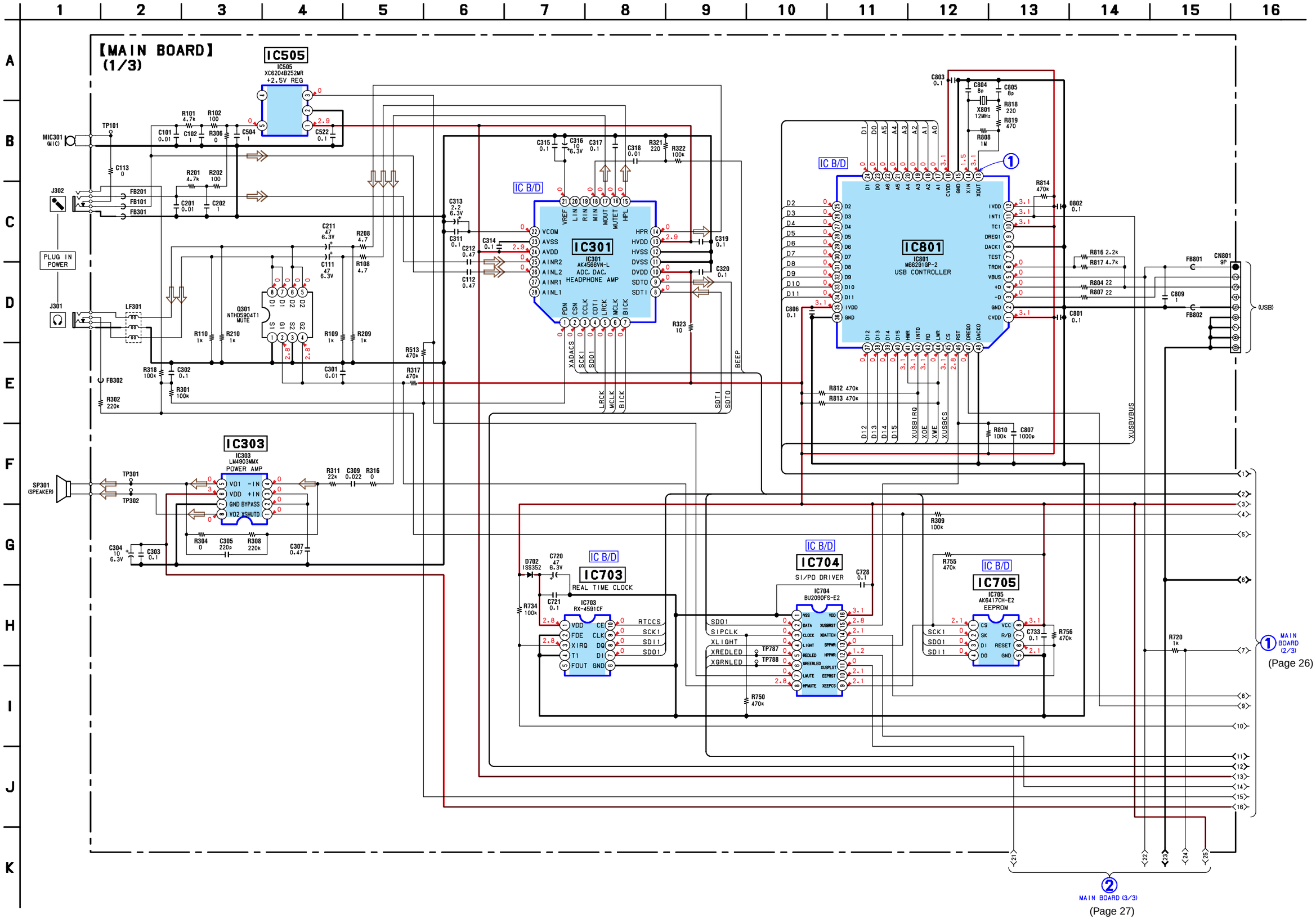


• **Semiconductor Location**

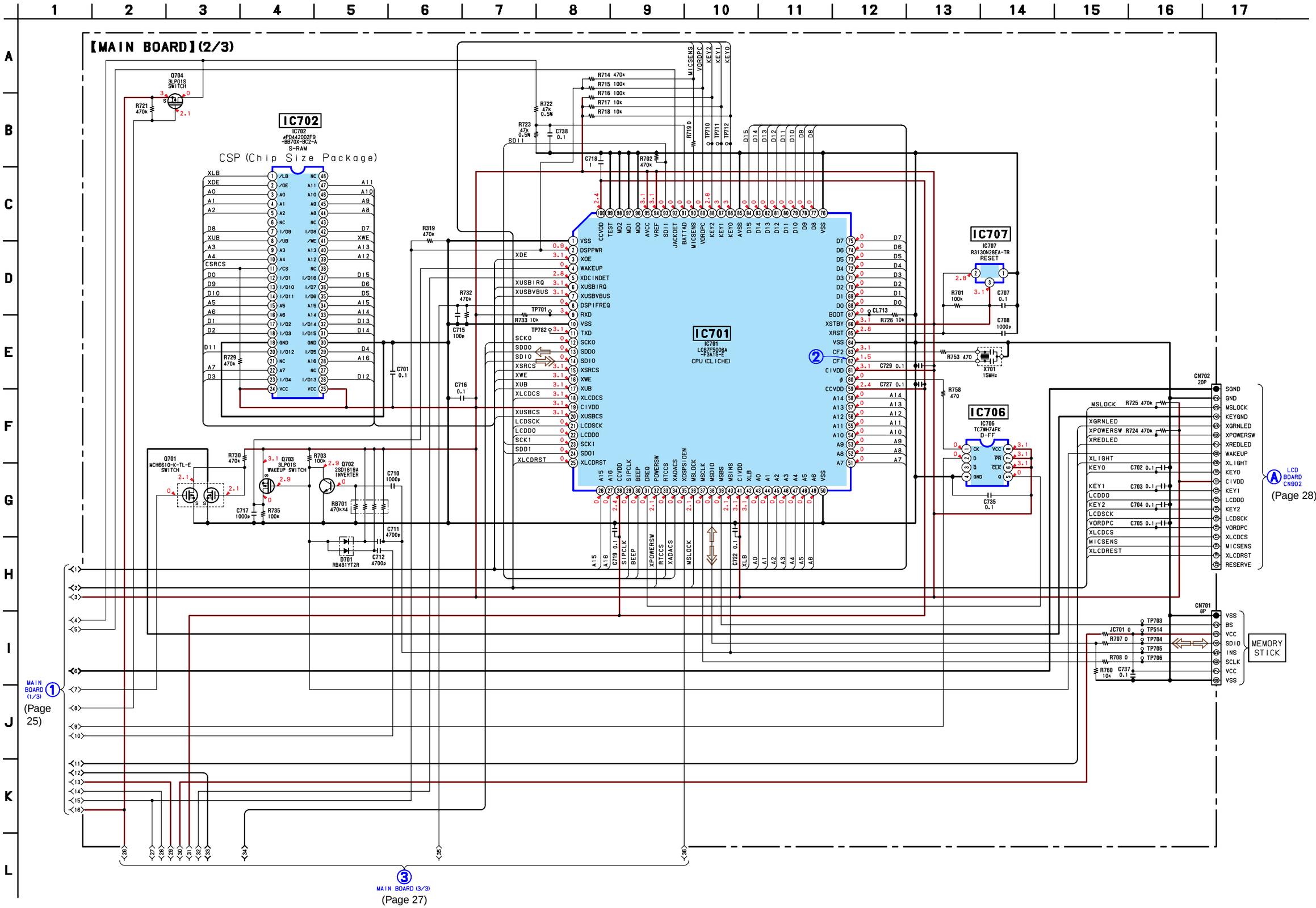
Ref. No.	Location
D501	B-10
D502	B-10
D503	C-8
D505	E-10
D506	C-10
D507	C-10
D701	H-8
D702	J-5
D801	J-10
IC301	C-5
IC303	B-6
IC501	E-10
IC502	D-7
IC503	D-11
IC504	E-8
IC505	E-5
IC506	C-8
IC508	D-7
IC509	C-7
IC513	E-7
IC601	I-8
IC602	D-6
IC701	H-5
IC702	G-9
IC703	J-5
IC704	J-6
IC705	J-4
IC706	I-7
IC707	G-6
IC801	H-11
Q301	B-4
Q501	D-8
Q502	D-7
Q503	E-7
Q504	D-10
Q505	C-11
Q506	F-11
Q507	G-12
Q509	C-7
Q511	B-7
Q701	H-7
Q702	H-8
Q703	G-8
Q704	B-6

3-5. SCHEMATIC DIAGRAM — MAIN SECTION (1/3) —

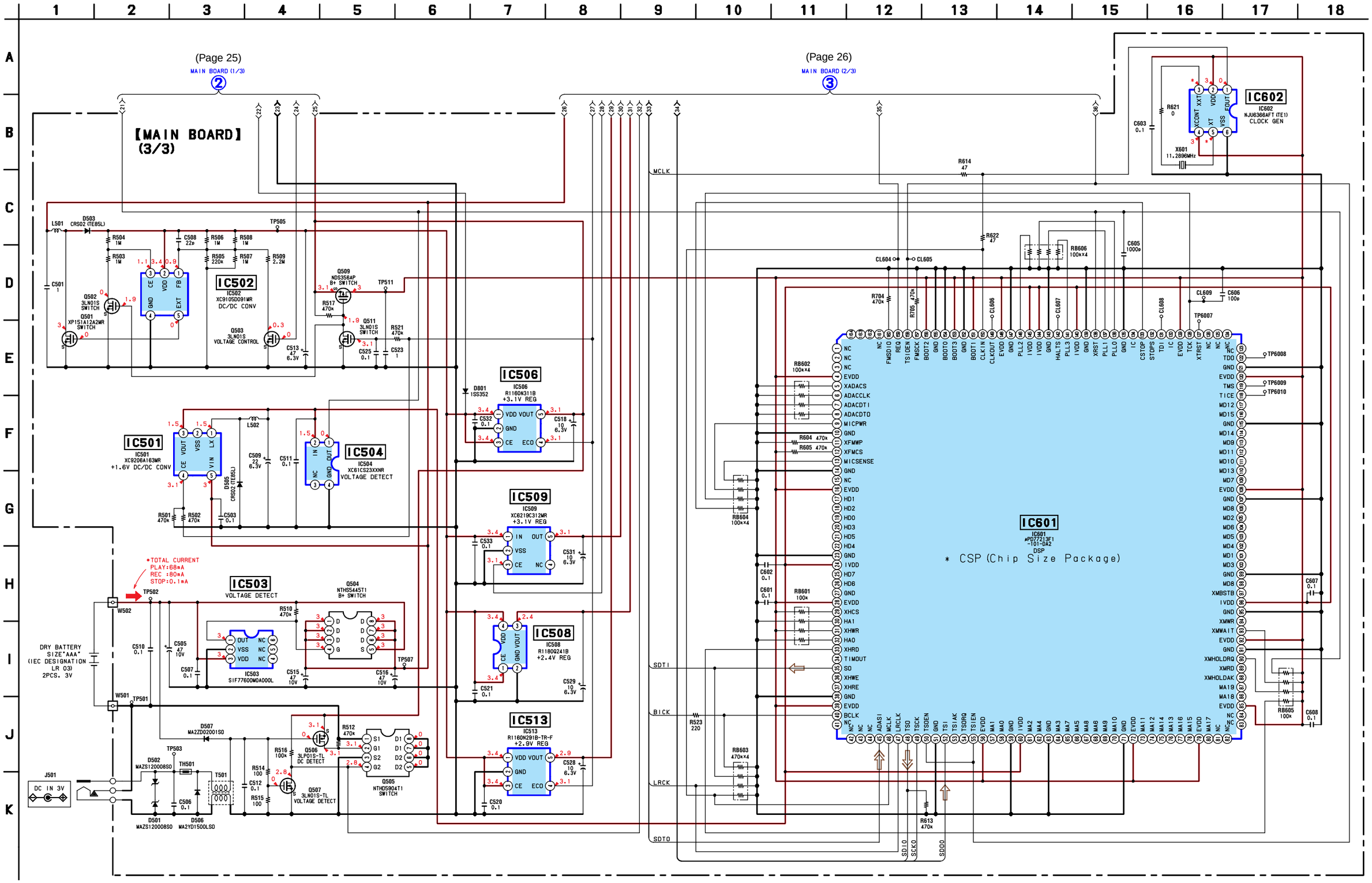
• Refer to page 23 for Common Note on Schematic Diagrams and Waveform.
• Refer to page 31 for IC Block Diagrams.



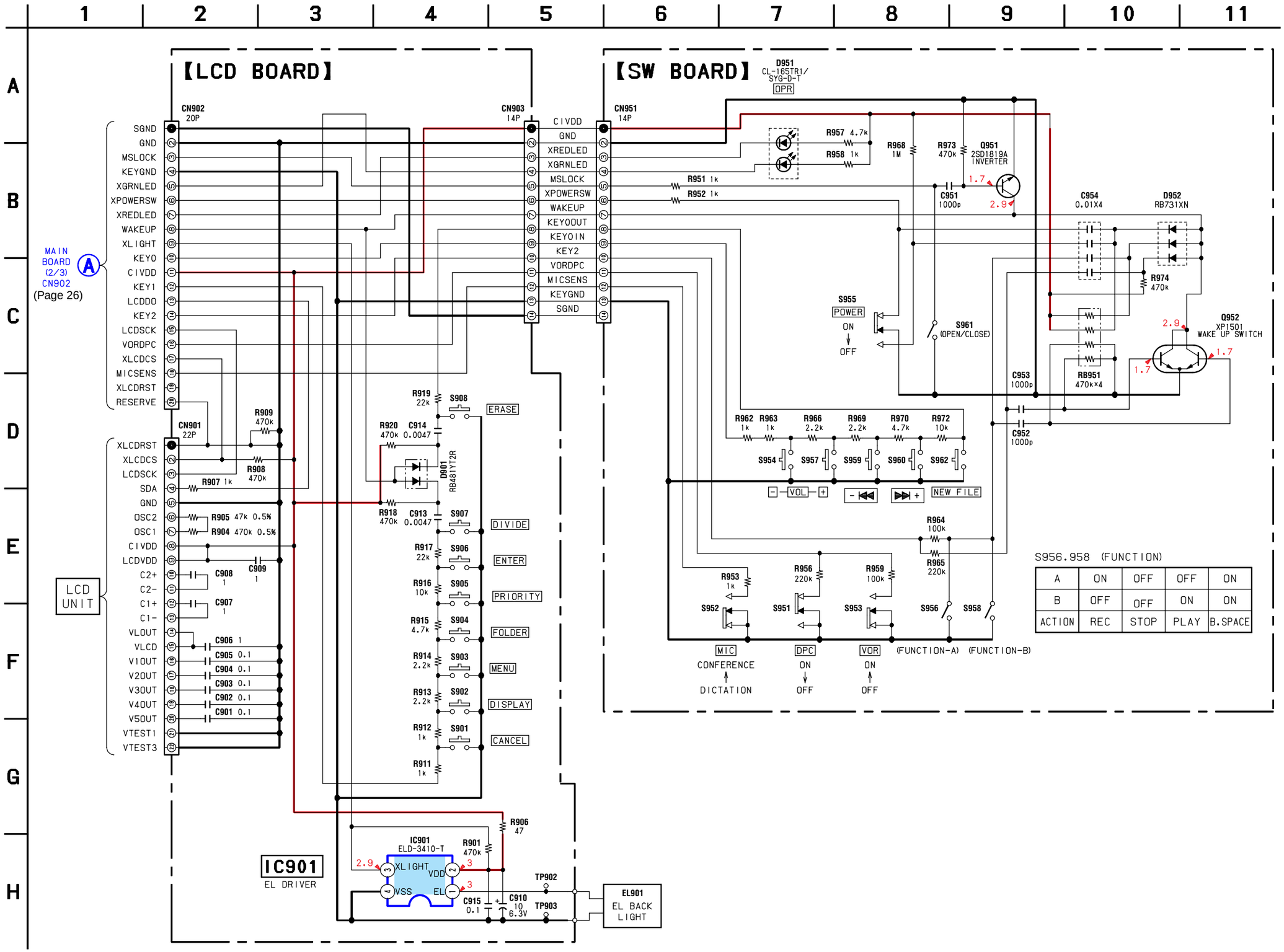
3-6. SCHEMATIC DIAGRAM — MAIN SECTION (2/3) — • Refer to page 23 for Common Note on Schematic Diagrams and Waveform.



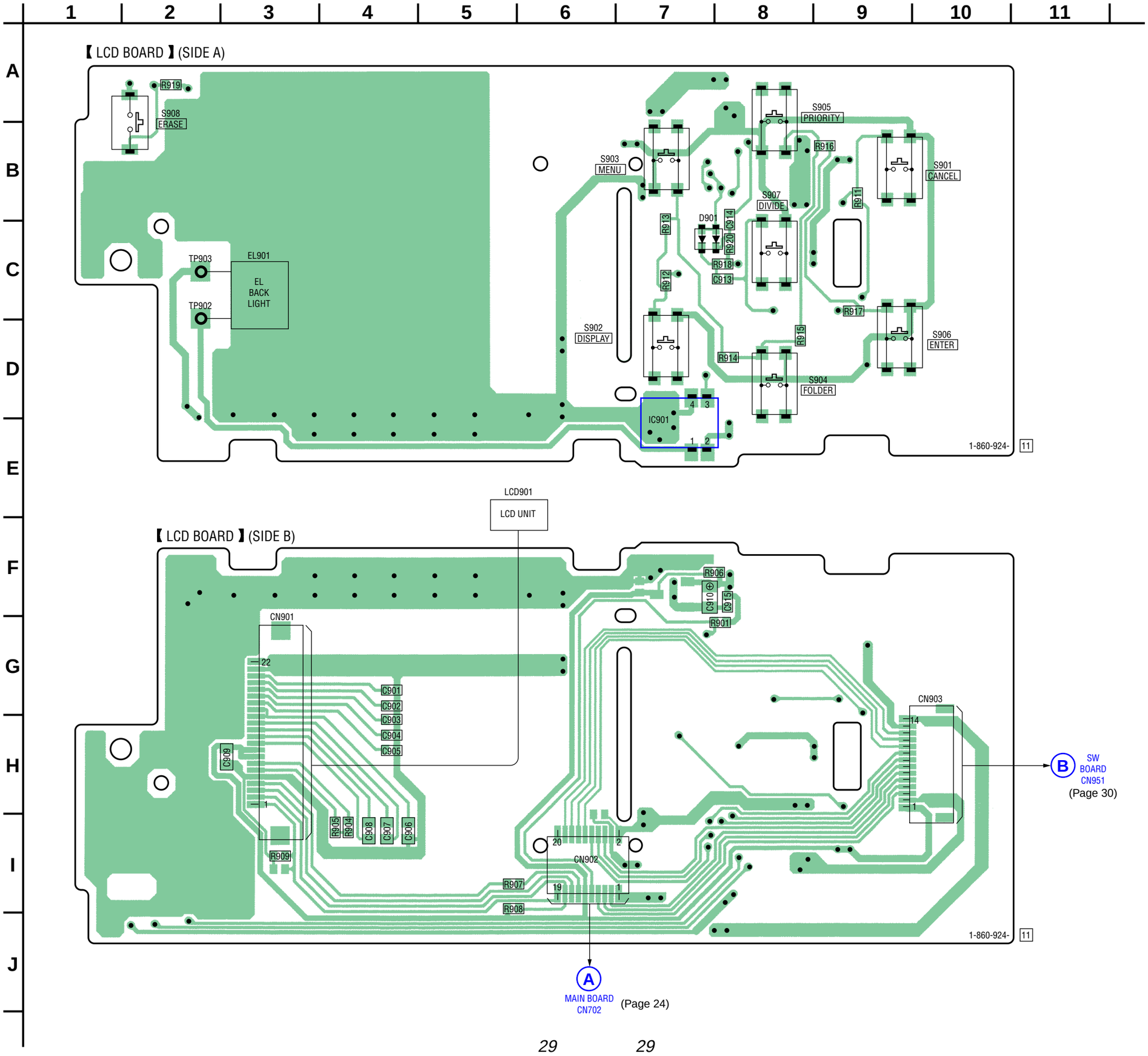
3-7. SCHEMATIC DIAGRAM — MAIN SECTION (3/3) — • Refer to page 23 for Common Note on Schematic Diagrams.



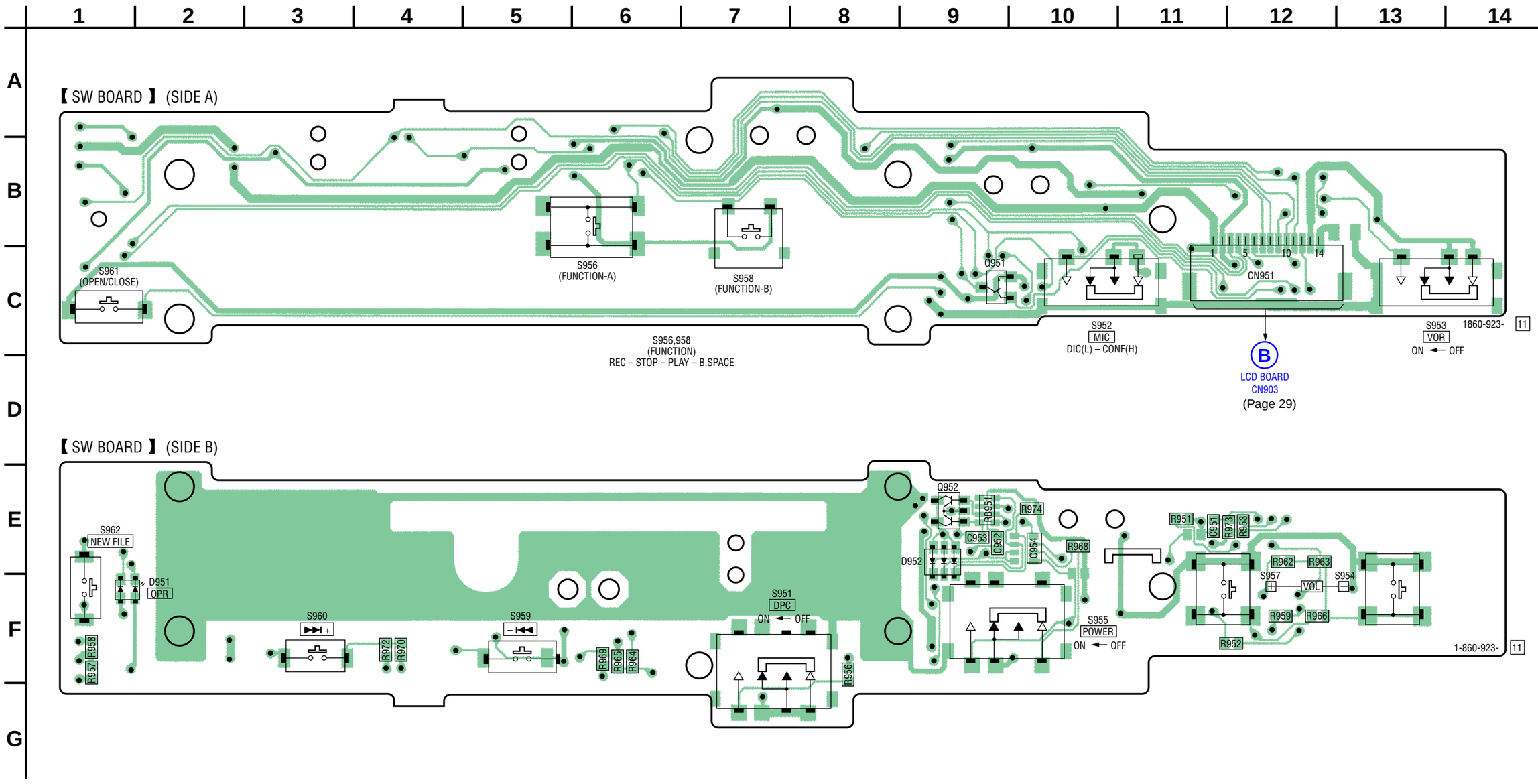
3-8. SCHEMATIC DIAGRAM — LCD/SW SECTION — • Refer to page 23 for Common Note on Schematic Diagrams.



3-9. PRINTED WIRING BOARD — LCD SECTION — • Refer to page 23 for Common Note on Printed Wiring Boards. : Uses unleaded solder.

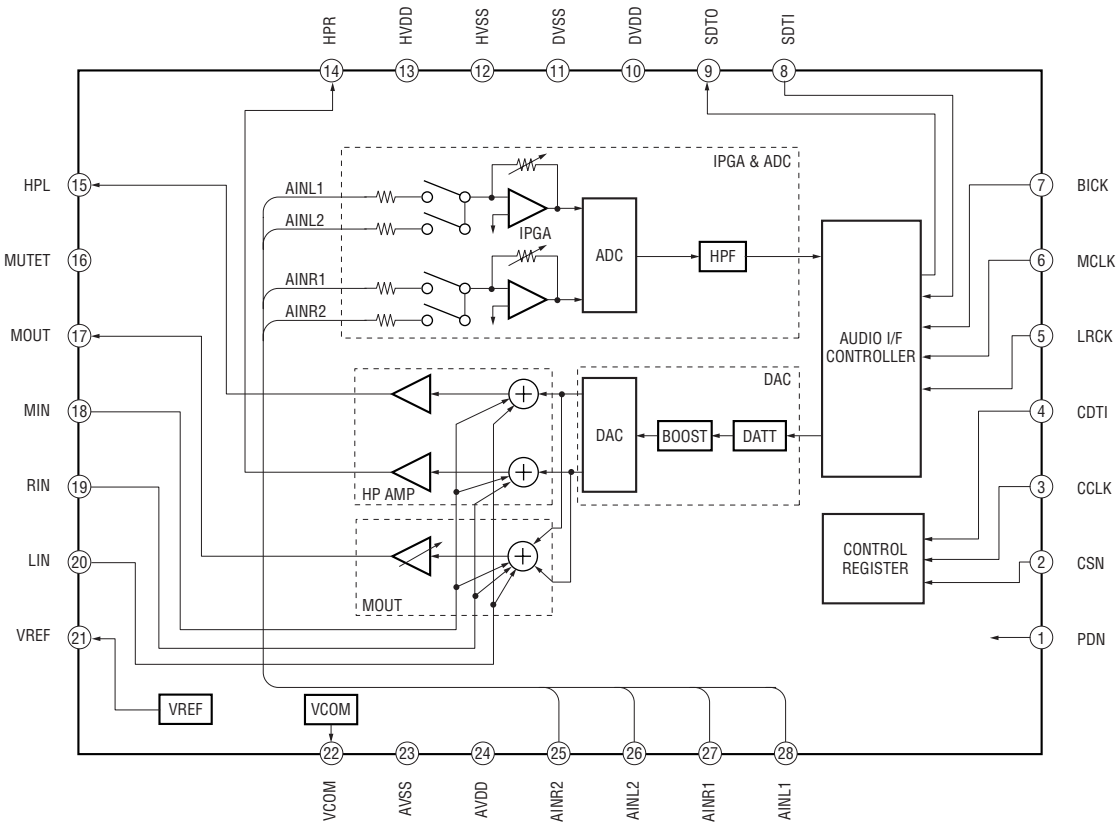


3-10. PRINTED WIRING BOARD — SW SECTION — • Refer to page 23 for Common Note on Printed Wiring Boards. : Uses unleaded solder.

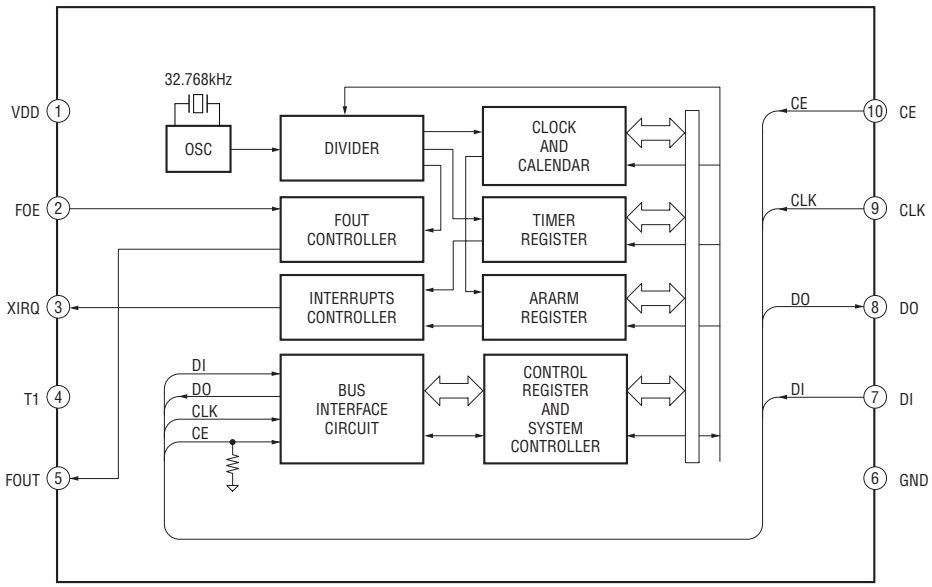


3-11. IC BLOCK DIAGRAMS

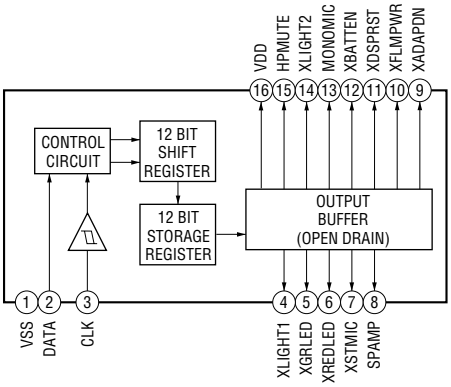
IC301 AK4566VN-L (MAIN Board (1/3))



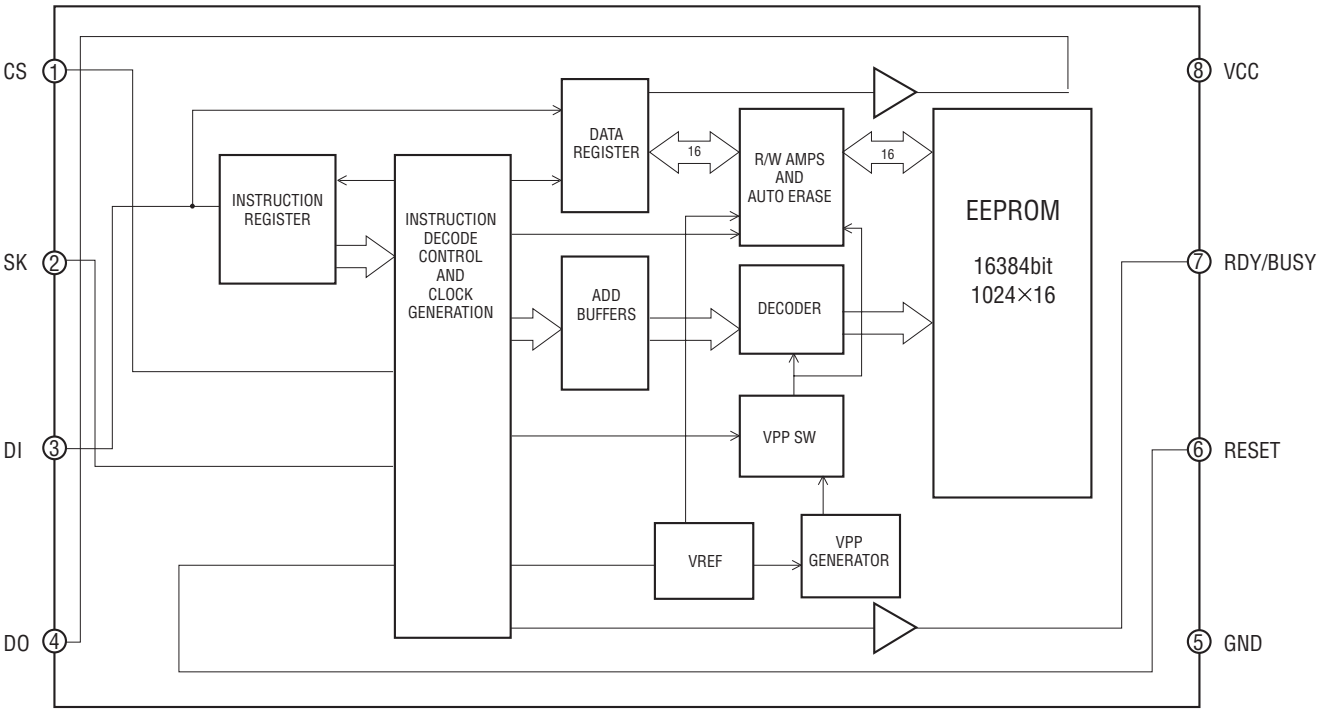
IC703 RX-4591CF (MAIN Board (1/3))



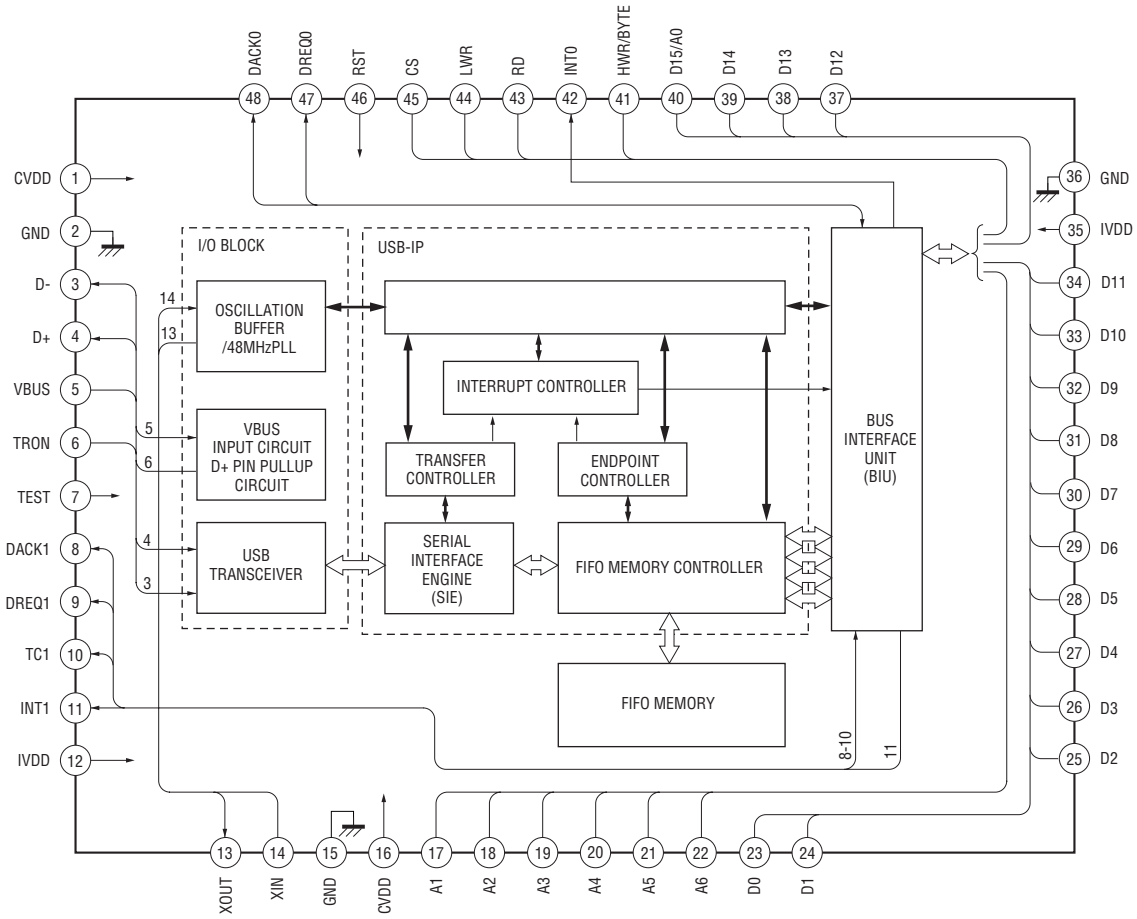
IC704 BU2090FS-E2 (MAIN Board (1/3))



IC705 AK6417CH-E2 (MAIN Board (1/3))



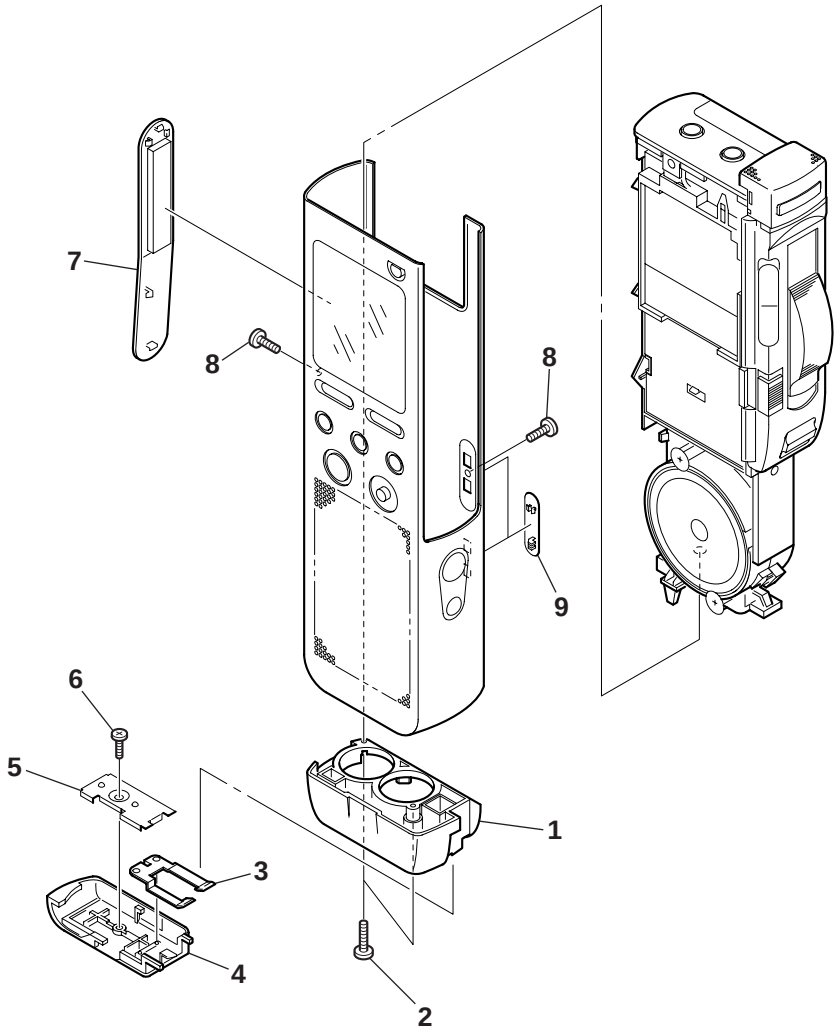
IC801 M66291GP-2 (MAIN Board (1/3))



SECTION 4
EXPLODED VIEWS

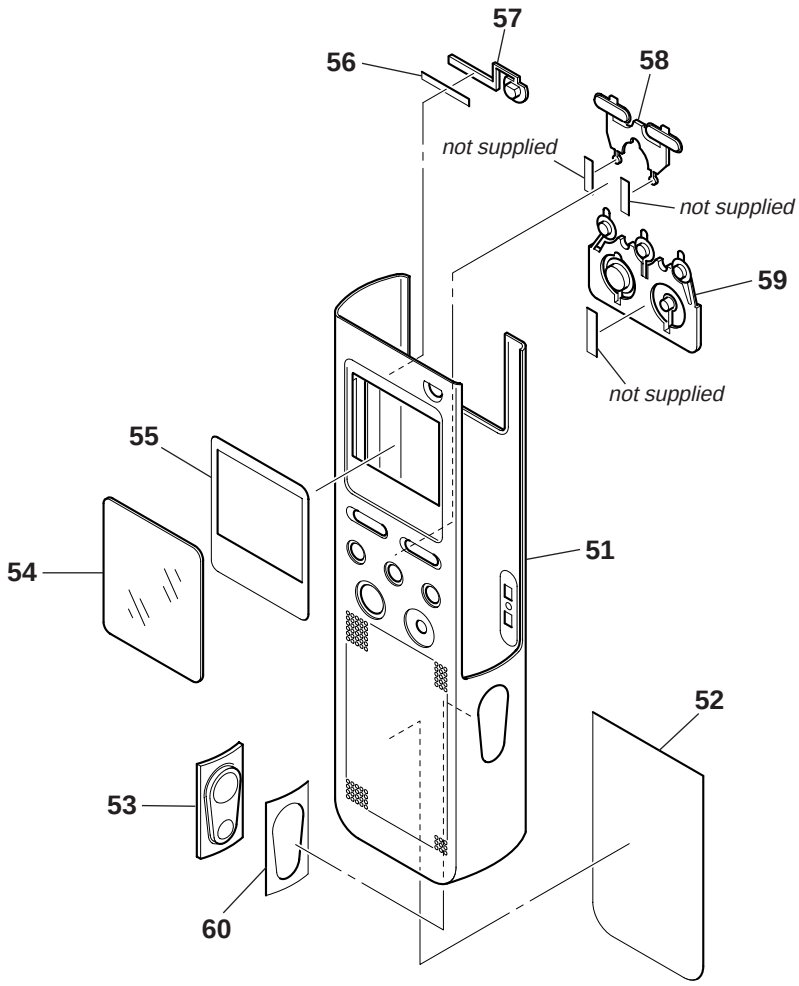
NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.

4-1. MAIN SECTION



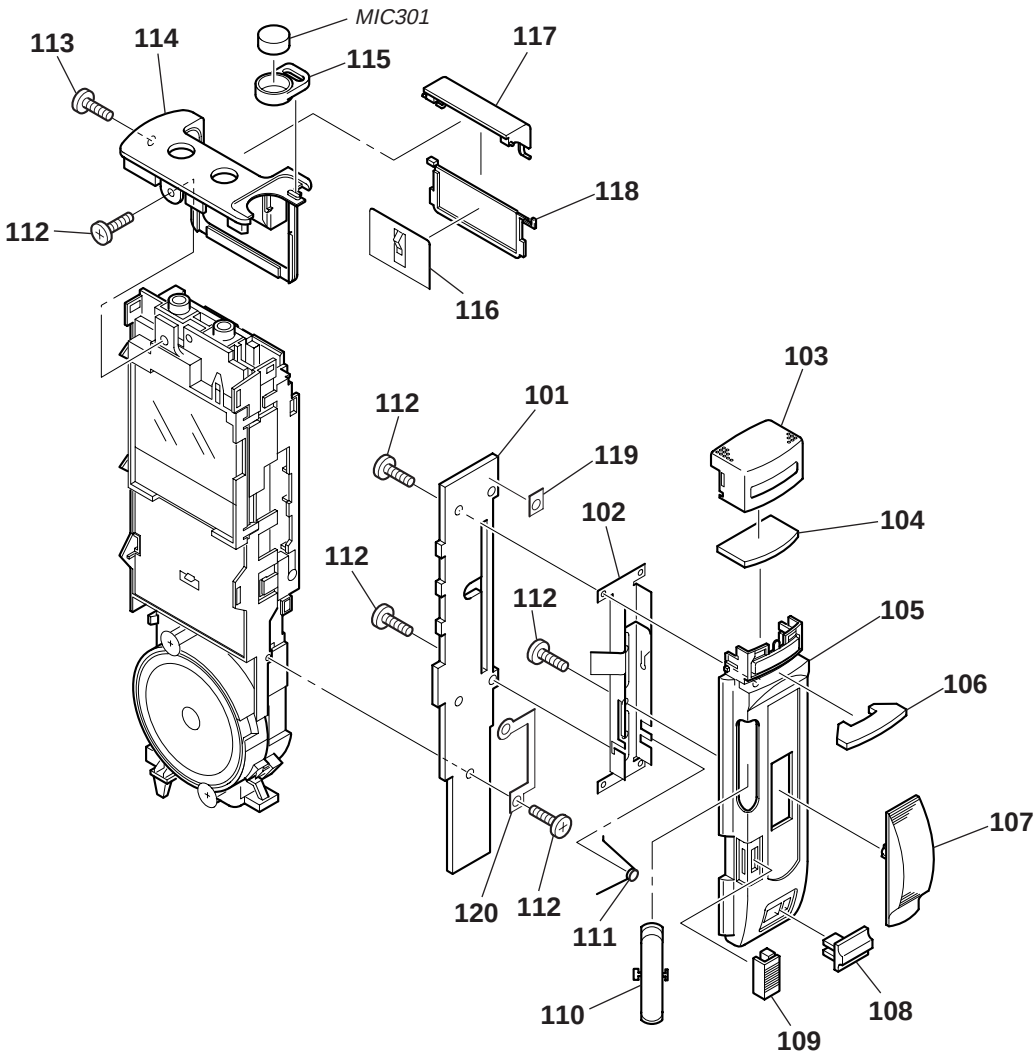
Ref. No.	Part No.	Description	Remark
1	3-260-469-01	ATTACHMENT (BATTERY LID)	
2	3-252-824-11	SCREW (1.4)	
3	3-260-472-01	HINGE (BATTERY LID)	
4	3-260-475-01	LID, BATTERY CASE	
5	3-260-471-01	TERMINAL (+/–), BATTERY	
6	3-248-370-01	SCREW, SELF TAP	
7	3-260-459-01	CONNECTOR, LID	
8	4-963-883-71	SCREW (M1.4), PRECISION PAN	
9	3-260-462-01	KNOB (REAR)	

4-2. CASE SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-260-497-01	CASE		56	3-260-506-01	SHEET (ERASE), ADHESIVE	
52	3-260-425-01	NET (SPEAKER)		57	3-260-435-01	BUTTON (ERASE)	
53	3-260-436-01	BUTTON (VOL)		58	3-261-295-01	BUTTON (FRONT) (B)	
54	3-260-461-01	WINDOW (LCD)		59	3-260-426-01	BUTTON (FRONT) (A)	
55	3-260-460-01	SHEET (WINDOW), ADHESIVE		60	3-260-498-01	SHEET (CASE), ADHESIVE	

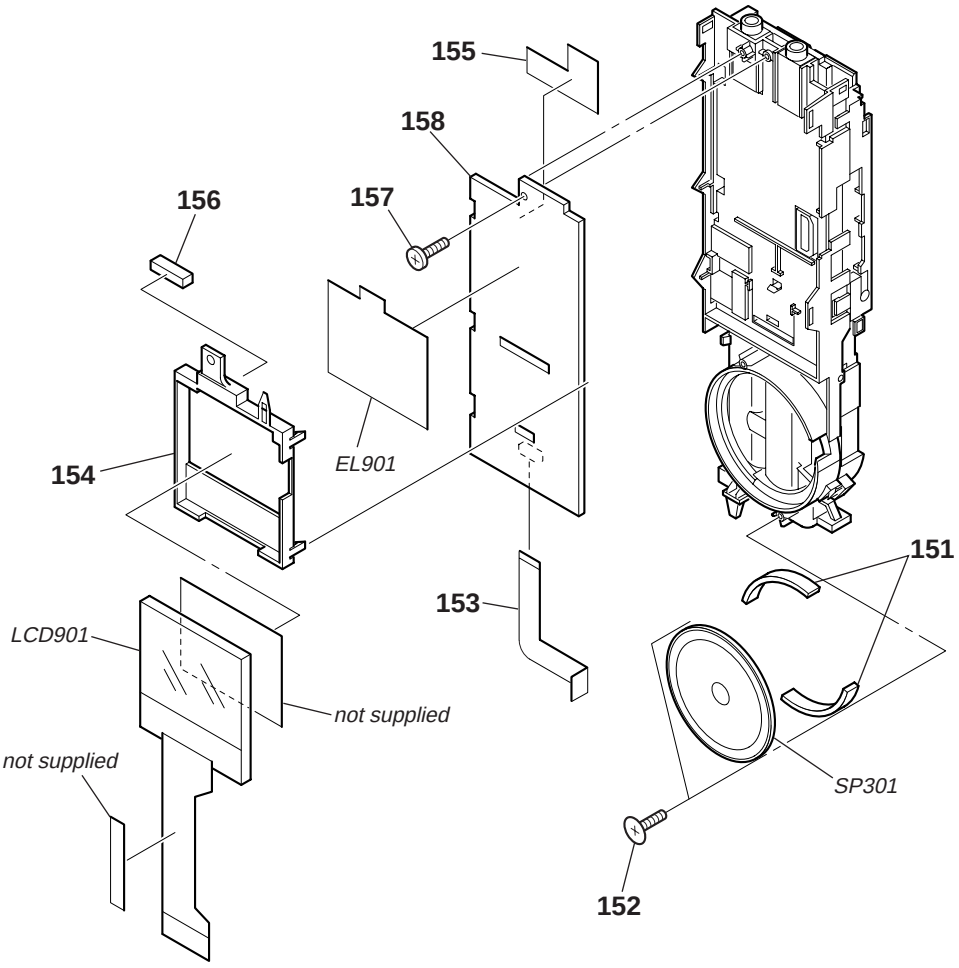
4-3. ORNAMENT SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-4541-673-A	SW BOARD, COMPLETE	
102	X-3384-213-1	SLIDE ASSY	
103	3-260-481-01	ORNAMENT (MIC)	
104	3-260-545-01	FILTER (MIC)	
105	3-260-529-01	ORNAMENT (SLIDE)	
106	3-260-544-01	WINDOW (LED)	
107	3-260-527-01	KNOB (SLIDE)	
108	3-260-523-01	KNOB (POWER)	
109	3-260-522-01	KNOB (DPC)	
110	3-260-526-01	BUTTON (F/R)	
111	3-260-525-01	SPRING (REVIEW), TORSION	

Ref. No.	Part No.	Description	Remark
112	3-247-180-01	SCREW, B TYPE	
113	3-225-996-12	SCREW (M1.4) (EG), PRECISION PAN	
114	3-260-488-01	FRAME (MS)	
115	3-260-546-01	CUSHION (MIC)	
116	3-260-482-01	PLATE (MS)	
117	3-260-484-01	SHUTTER (MS)	
118	3-260-483-01	SLIDER (MS)	
119	3-265-476-01	LEAF (MICROPHONE), COPPER	
120	3-264-960-01	LEAF (SLIDE), COPPER	
MIC301	1-542-572-11	MICROPHONE, ELECTRET CAP (Mic)	

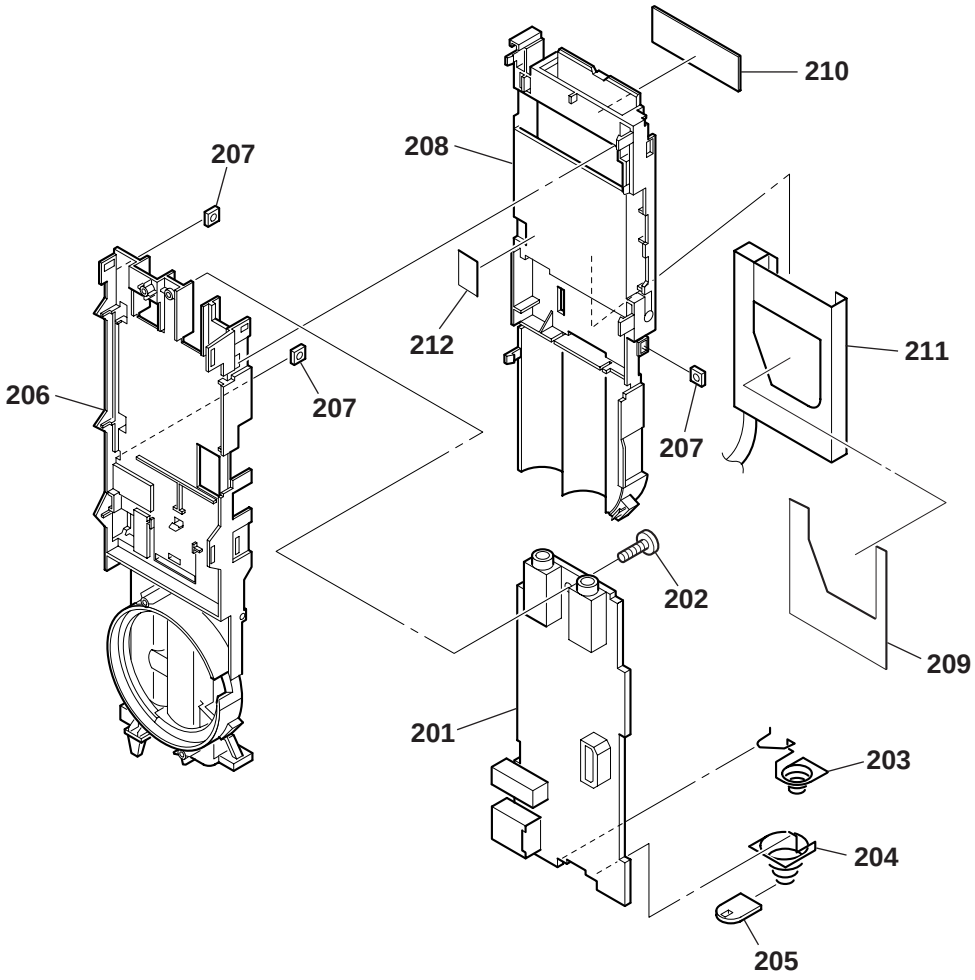
4-4. CHASSIS (1) SECTION



Ref. No.	Part No.	Description	Remark
151	3-260-479-01	CUSHION (SPEAKER)	
152	3-963-156-01	SCREW (BTP1.7X3), SPECIAL	
153	1-860-925-11	FLEXIBLE BOARD	
154	3-260-504-01	HOLDER (LCD)	
155	3-261-078-01	SHEET (JACK)	
156	3-260-501-01	CUSHION (EL)	

Ref. No.	Part No.	Description	Remark
157	3-248-370-01	SCREW, SELF TAP	
* 158	A-4541-671-A	LCD BOARD, COMPLETE	
EL901	1-805-472-11	ELEMENT, EL	
LCD901	1-477-070-11	INDICATOR UNIT, LIQUID CRYSTAL	
SP301	1-825-645-11	SPEAKER (2.8cm)	

4-5. CHASSIS (2) SECTION



Ref. No.	Part No.	Description	Remark
* 201	A-4541-666-A	MAIN BOARD, COMPLETE	
202	3-225-996-12	SCREW (M1.4) (EG), PRECISION PAN	
203	3-260-477-01	TERMINAL (–), BATTERY	
204	3-260-478-01	TERMINAL (+), BATTERY	
205	3-250-332-01	CAP (TERMINAL)	
206	3-260-491-01	CHASSIS (FRONT)	
207	3-221-591-01	NUT (M1.4)	
208	3-260-489-01	CHASSIS (REAR)	
209	3-260-480-01	SHEET (MS), ADHESIVE	
210	3-260-486-01	WINDOW (MS)	
211	1-818-067-11	CONNECTOR, MEMORY STICK	
212	3-261-081-01	SHEET (CONNECTOR)	

SECTION 5
ELECTRICAL PARTS LIST

LCD MAIN

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-4541-671-A	LCD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C901	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C902	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C903	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C904	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C905	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C906	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C907	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C908	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C909	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C910	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C913	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C914	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C915	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
		< CONNECTOR >			
* CN901	1-793-750-21	CONNECTOR, FPC (ZIF) 22P			
CN902	1-818-057-21	CONNECTOR, BOARD TO BOARD 20P			
CN903	1-818-066-21	CONNECTOR, FFC/FPC 14P			
		< DIODE >			
D901	6-500-054-01	DIODE RB481YT2R			
		< IC >			
IC901	6-705-004-01	IC ELD-3410-T			
		< RESISTOR >			
R901	1-218-985-11	RES-CHIP	470K	5%	1/16W
R904	1-218-985-11	METAL CHIP	470K	0.5%	1/16W
R905	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R906	1-218-937-11	RES-CHIP	47	5%	1/16W
R907	1-218-953-11	RES-CHIP	1K	5%	1/16W
R908	1-218-985-11	RES-CHIP	470K	5%	1/16W
R909	1-218-985-11	RES-CHIP	470K	5%	1/16W
R911	1-218-953-11	RES-CHIP	1K	5%	1/16W
R912	1-218-953-11	RES-CHIP	1K	5%	1/16W
R913	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R914	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R915	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R916	1-218-965-11	RES-CHIP	10K	5%	1/16W
R917	1-218-969-11	RES-CHIP	22K	5%	1/16W
R918	1-218-985-11	RES-CHIP	470K	5%	1/16W
R919	1-218-969-11	RES-CHIP	22K	5%	1/16W
R920	1-218-985-11	RES-CHIP	470K	5%	1/16W
		< SWITCH >			
S901	1-786-710-11	SWITCH, TACTILE (CANCEL)			
S902	1-786-710-11	SWITCH, TACTILE (DISPLAY)			
S903	1-786-710-11	SWITCH, TACTILE (MENU)			
S904	1-786-710-11	SWITCH, TACTILE (FOLDER)			
S905	1-786-710-11	SWITCH, TACTILE (PRIORITY)			
S906	1-786-710-11	SWITCH, TACTILE (ENTER)			
S907	1-786-710-11	SWITCH, TACTILE (DIVIDE)			
S908	1-786-638-21	SWITCH, TACTILE (ERASE)			
**********					
*	A-4541-666-A	MAIN BOARD, COMPLETE			
		**********			
	3-260-546-01	CUSHION (MIC)			
	3-261-081-01	SHEET (CONNECTOR)			
		< CAPACITOR >			
C101	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C102	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C111	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C112	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C113	1-218-990-11	SHORT CHIP	0		
C201	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C202	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C211	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C212	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C301	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C302	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C303	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C304	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C305	1-164-933-11	CERAMIC CHIP	220PF	10%	50V
C307	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C309	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C311	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C313	1-113-600-11	TANTAL. CHIP	2.2uF	20%	6.3V
C314	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C315	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C316	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C317	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C318	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C319	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C320	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C501	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C503	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C504	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C505	1-137-934-11	TANTAL. CHIP	47uF	20%	10V
C506	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C508	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C509	1-137-739-11	TANTAL. CHIP	22uF	20%	6.3V
C510	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C513	1-165-845-21	TANTAL. CHIP	47uF	20%	6.3V
C515	1-137-934-11	TANTAL. CHIP	47uF	20%	10V
C516	1-137-934-11	TANTAL. CHIP	47uF	20%	10V
C518	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C520	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C521	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C522	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C523	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C525	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C528	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C529	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C531	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C532	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C533	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C602	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C603	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C605	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C606	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C607	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C608	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C701	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C702	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C703	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C704	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C705	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C707	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C708	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C710	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C711	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C712	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C715	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C716	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C717	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C718	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C719	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C720	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C721	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C722	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C727	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C728	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C729	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C733	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C735	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C737	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C738	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V

Ref. No.	Part No.	Description			Remark
C801	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C802	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C803	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C804	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C805	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C806	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C807	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C809	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
		< CONNECTOR >			
* CN701	1-815-284-21	CONNECTOR, FPC (ZIF) 8P			
CN702	1-818-058-21	CONNECTOR, BOARD TO BOARD 20P			
CN801	1-816-036-21	CONNECTOR (SQUARE TYPE) (USB) 5P			
		< DIODE >			
D501	8-719-056-59	DIODE MAZS120008SO			
D502	8-719-056-59	DIODE MAZS120008SO			
D503	8-719-074-47	DIODE CRS02(TE85L)			
D505	8-719-074-47	DIODE CRS02(TE85L)			
D506	8-719-081-33	DIODE MA2YD1500LS0			
D507	8-719-075-93	DIODE MA2ZD02001SO			
D701	6-500-054-01	DIODE RB481YT2R			
D702	8-719-016-74	DIODE 1SS352			
D801	8-719-016-74	DIODE 1SS352			
		< FERRITE BEAD >			
FB101	1-469-084-21	INDUCTOR, FERRITE BEAD			
FB201	1-469-084-21	INDUCTOR, FERRITE BEAD			
FB301	1-469-084-21	INDUCTOR, FERRITE BEAD			
FB302	1-469-084-21	INDUCTOR, FERRITE BEAD			
FB801	1-500-282-11	INDUCTOR, FERRITE BEAD			
FB802	1-500-282-11	INDUCTOR, FERRITE BEAD			
		< IC >			
IC301	6-703-859-01	IC AK4566VN-L			
IC303	6-702-990-01	IC LLM4903MMX/J5000273			
IC501	6-705-496-01	IC XC9206A163MR			
IC502	6-701-734-01	IC XC9105D091MR			
IC503	6-705-321-01	IC S1F77600M0A000L			
IC504	6-703-865-01	IC XC61CS23XXNR			
IC505	6-703-074-01	IC XC6204B252MR			
IC506	6-705-498-01	IC R1160N311B-TR-FA			
IC508	6-705-495-01	IC R1180Q241B-TR-FA			
IC509	6-705-499-01	IC XC6219C312MR			
IC513	6-703-864-01	IC R1160N291B-TR-FA			
@ IC601	6-803-583-01	IC uPD77213F1-101-DA2			
IC602	6-703-867-01	IC NJU6366AF1(TE1)			
IC701	6-705-497-01	IC LC67F5006A-F3A15-E			
@ IC702	6-701-667-01	IC uPD442002F9-BB70X-BC2-A			
IC703	6-703-861-01	IC RX-4591CF			
IC704	8-759-670-89	IC BU2090FS-E2			
* IC705	6-702-923-01	IC AK6417CH-E2			
IC706	8-759-698-31	IC TC7WH74FK			
IC707	6-701-736-01	IC R3130N28EA-TR			
IC801	6-702-098-01	IC M66291GP-2			

@ Replacement of µPD77213F1-101-DA2 (IC601) and µPD442002F9-BB70X-BC2-A (IC702) used in this set requires a special tool. Therefore, it cannot be replaced.

Ref. No.	Part No.	Description			Remark
		< JACK >			
J301	1-818-056-11	JACK (🎧)			
J302	1-818-055-11	JACK (🔧(PLUG IN POWER))			
J501	1-794-615-11	JACK, DC (POLARITY UNIFIED TYPE)			(DC IN 3V)
		< JUMPER RESISTOR >			
JC701	1-218-990-11	SHORT CHIP	0		
		< COIL >			
L501	1-456-679-21	COIL, CHOKE			
L502	1-456-679-21	COIL, CHOKE			
LF301	1-428-965-11	COIL, CHOKE (SMD)			
		< TRANSISTOR >			
Q301	6-550-527-01	FET NTHD5904T1			
Q501	8-729-053-03	FET XP151A12A2MR			
Q502	6-550-746-01	FET 3LN01S-K-TL-E			
Q503	6-550-746-01	FET 3LN01S-K-TL-E			
Q504	6-550-096-01	FET NTHS5445T1			
Q505	6-550-527-01	FET NTHD5904T1			
Q506	6-550-747-01	FET 3LP01S-K-TL-E			
Q507	6-550-746-01	FET 3LN01S-K-TL-E			
Q509	8-729-041-23	FET NDS356AP			
Q511	6-550-746-01	FET 3LN01S-K-TL-E			
Q701	6-550-748-01	FET MCH6610-K-TL-E			
Q702	8-729-402-32	TRANSISTOR 2SD1819A-R			
Q703	6-550-747-01	FET 3LP01S-K-TL-E			
Q704	6-550-747-01	FET 3LP01S-K-TL-E			
		< RESISTOR >			
R101	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R102	1-218-941-81	RES-CHIP	100	5%	1/16W
R108	1-220-803-81	RES-CHIP	4.7	5%	1/16W
R109	1-218-953-11	RES-CHIP	1K	5%	1/16W
R110	1-218-953-11	RES-CHIP	1K	5%	1/16W
R201	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R202	1-218-941-81	RES-CHIP	100	5%	1/16W
R208	1-220-803-81	RES-CHIP	4.7	5%	1/16W
R209	1-218-953-11	RES-CHIP	1K	5%	1/16W
R210	1-218-953-11	RES-CHIP	1K	5%	1/16W
R301	1-218-977-11	RES-CHIP	100K	5%	1/16W
R302	1-218-981-11	RES-CHIP	220K	5%	1/16W
R304	1-218-990-11	SHORT CHIP	0		
R306	1-218-990-11	SHORT CHIP	0		
R308	1-218-981-11	RES-CHIP	220K	5%	1/16W
R309	1-218-977-11	RES-CHIP	100K	5%	1/16W
R311	1-218-969-11	RES-CHIP	22K	5%	1/16W
R316	1-218-990-11	SHORT CHIP	0		
R317	1-218-985-11	RES-CHIP	470K	5%	1/16W
R318	1-218-977-11	RES-CHIP	100K	5%	1/16W
R319	1-218-985-11	RES-CHIP	470K	5%	1/16W
R321	1-218-945-11	RES-CHIP	220	5%	1/16W
R322	1-218-977-11	RES-CHIP	100K	5%	1/16W
R323	1-208-635-11	RES-CHIP	10	5%	1/16W
R501	1-218-985-11	RES-CHIP	470K	5%	1/16W
R502	1-218-985-11	RES-CHIP	470K	5%	1/16W
R503	1-218-989-11	RES-CHIP	1M	5%	1/16W
R504	1-218-989-11	RES-CHIP	1M	5%	1/16W
R505	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R506	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R507	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R508	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R509	1-220-804-11	RES-CHIP	2.2M	5%	1/16W
R510	1-218-985-11	RES-CHIP	470K	5%	1/16W
R512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R513	1-218-985-11	RES-CHIP	470K	5%	1/16W
R514	1-216-809-11	METAL CHIP	100	5%	1/10W
R515	1-216-809-11	METAL CHIP	100	5%	1/10W
R516	1-218-977-11	RES-CHIP	100K	5%	1/16W
R517	1-218-985-11	RES-CHIP	470K	5%	1/16W
R521	1-218-985-11	RES-CHIP	470K	5%	1/16W
R523	1-218-945-11	RES-CHIP	220	5%	1/16W
R604	1-218-985-11	RES-CHIP	470K	5%	1/16W
R605	1-218-985-11	RES-CHIP	470K	5%	1/16W
R613	1-218-985-11	RES-CHIP	470K	5%	1/16W
R614	1-218-937-11	RES-CHIP	47	5%	1/16W
R621	1-218-990-11	SHORT CHIP	0		
R622	1-218-937-11	RES-CHIP	47	5%	1/16W
R701	1-218-977-11	RES-CHIP	100K	5%	1/16W
R702	1-218-985-11	RES-CHIP	470K	5%	1/16W
R703	1-218-977-11	RES-CHIP	100K	5%	1/16W
R704	1-218-985-11	RES-CHIP	470K	5%	1/16W
R705	1-218-985-11	RES-CHIP	470K	5%	1/16W
R707	1-218-990-11	SHORT CHIP	0		
R708	1-218-990-11	SHORT CHIP	0		
R714	1-218-985-11	RES-CHIP	470K	5%	1/16W
R715	1-218-977-11	RES-CHIP	100K	5%	1/16W
R716	1-218-977-11	RES-CHIP	100K	5%	1/16W
R717	1-218-965-11	RES-CHIP	10K	5%	1/16W
R718	1-218-965-11	RES-CHIP	10K	5%	1/16W
R719	1-218-990-11	SHORT CHIP	0		
R720	1-218-953-11	RES-CHIP	1K	5%	1/16W
R721	1-218-985-11	RES-CHIP	470K	5%	1/16W
R722	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R723	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R724	1-218-985-11	RES-CHIP	470K	5%	1/16W
R725	1-218-985-11	RES-CHIP	470K	5%	1/16W
R726	1-218-965-11	RES-CHIP	10K	5%	1/16W
R729	1-218-985-11	RES-CHIP	470K	5%	1/16W
R730	1-218-985-11	RES-CHIP	470K	5%	1/16W
R732	1-218-985-11	RES-CHIP	470K	5%	1/16W
R733	1-218-965-11	RES-CHIP	10K	5%	1/16W
R734	1-218-977-11	RES-CHIP	100K	5%	1/16W
R735	1-218-977-11	RES-CHIP	100K	5%	1/16W
R750	1-218-985-11	RES-CHIP	470K	5%	1/16W
R753	1-218-949-11	RES-CHIP	470	5%	1/16W
R755	1-218-985-11	RES-CHIP	470K	5%	1/16W
R756	1-218-985-11	RES-CHIP	470K	5%	1/16W
R758	1-218-949-11	RES-CHIP	470	5%	1/16W
R760	1-218-965-11	RES-CHIP	10K	5%	1/16W
R804	1-218-933-11	RES-CHIP	22	5%	1/16W
R807	1-218-933-11	RES-CHIP	22	5%	1/16W
R808	1-218-989-11	RES-CHIP	1M	5%	1/16W
R810	1-218-977-11	RES-CHIP	100K	5%	1/16W

MAIN **SW**

Ref. No.	Part No.	Description			Remark
R812	1-218-985-11	RES-CHIP	470K	5%	1/16W
R813	1-218-985-11	RES-CHIP	470K	5%	1/16W
R814	1-218-985-11	RES-CHIP	470K	5%	1/16W
R816	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R817	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R818	1-218-945-11	RES-CHIP	220	5%	1/16W
R819	1-218-949-11	RES-CHIP	470	5%	1/16W
		< NETWORK RESISTOR >			
RB601	1-233-973-11	RES, NETWORK (CHIP TYPE) 100KX4			
RB602	1-233-973-11	RES, NETWORK (CHIP TYPE) 100KX4			
RB603	1-233-977-11	RES, NETWORK (CHIP TYPE) 470KX4			
RB604	1-233-973-11	RES, NETWORK (CHIP TYPE) 100KX4			
RB605	1-233-973-11	RES, NETWORK (CHIP TYPE) 100KX4			
RB606	1-233-973-11	RES, NETWORK (CHIP TYPE) 100KX4			
RB701	1-233-977-11	RES, NETWORK (CHIP TYPE) 470KX4			
		< FILTER >			
T501	1-416-405-21	FILTER, CHIP EMI (COMMON MODE)			
		< THERMISTOR (POSITIVE) >			
TH501	1-805-202-11	THERMISTOR, POSITIVE			
		< VARISTOR >			
VDR301	1-804-499-21	VARISTOR, CHIP (1608)			
		< VIBRATOR >			
X601	1-813-165-21	VIBRATOR, CRYSTAL (11.2896MHz)			
X701	1-813-166-21	VIBRATOR, CERAMIC (15MHz)			
X801	1-813-164-21	VIBRATOR, CRYSTAL (12MHz)			
**********					
*	A-4541-673-A	SW BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C951	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C952	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C953	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C954	1-100-770-11	CAP, SQUARE TYPE CHIP CERAMIC			0.01uFX4
		< CONNECTOR >			
CN951	1-794-747-21	CONNECTOR, FFC (LIF(NON-ZIF)) 14P			
		< DIODE >			
D951	6-500-774-01	LED CL-165TR1/SYG-D-T (OPR)			
D952	6-500-115-01	DIODE RB731XN			
		< TRANSISTOR >			
Q951	8-729-402-32	TRANSISTOR 2SD1819A-R			
Q952	8-729-429-44	TRANSISTOR XP1501			
		< RESISTOR >			
R951	1-218-953-11	RES-CHIP	1K	5%	1/16W
R952	1-218-953-11	RES-CHIP	1K	5%	1/16W
R953	1-218-953-11	RES-CHIP	1K	5%	1/16W
R956	1-218-981-11	RES-CHIP	220K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R957	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R958	1-218-953-11	RES-CHIP	1K	5%	1/16W
R959	1-218-977-11	RES-CHIP	100K	5%	1/16W
R962	1-218-953-11	RES-CHIP	1K	5%	1/16W
R963	1-218-953-11	RES-CHIP	1K	5%	1/16W
R964	1-218-977-11	RES-CHIP	100K	5%	1/16W
R965	1-218-981-11	RES-CHIP	220K	5%	1/16W
R966	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R968	1-218-989-11	RES-CHIP	1M	5%	1/16W
R969	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R970	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R972	1-218-965-11	RES-CHIP	10K	5%	1/16W
R973	1-218-985-11	RES-CHIP	470K	5%	1/16W
R974	1-218-985-11	RES-CHIP	470K	5%	1/16W
		< NETWORK RESISTOR >			
RB951	1-233-977-11	RES, NETWORK (CHIP TYPE) 470KX4			
		< SWITCH >			
S951	1-771-246-21	SWITCH, SLIDE (DPC)			
S952	1-572-922-11	SWITCH, SLIDE (MIC)			
S953	1-572-922-11	SWITCH, SLIDE (VOR)			
S954	1-771-844-21	SWITCH, TACTILE (SMD) (VOL –)			
S955	1-771-246-21	SWITCH, SLIDE (POWER)			
S956	1-786-644-21	SWITCH, PUSH (1 KEY) (FUNCTION-A)			
S957	1-771-844-21	SWITCH, TACTILE (SMD) (VOL +)			
S958	1-786-179-31	SWITCH, PUSH (1 KEY) (FUNCTION-B)			
S959	1-786-652-11	SWITCH, TACTILE (– ⏮)			
S960	1-786-652-11	SWITCH, TACTILE (⏭ +)			
S961	1-786-643-21	SWITCH, PUSH (1 KEY) (OPEN/CLOSE)			
S962	1-786-638-21	SWITCH, TACTILE (NEW FILE)			
**********					
		MISCELLANEOUS			
		**********			
153	1-860-925-11	FLEXIBLE BOARD			
211	1-818-067-11	CONNECTOR, MEMORY STICK			
EL901	1-805-472-11	ELEMENT, EL			
LCD901	1-477-070-11	INDICATOR UNIT, LIQUID CRYSTAL			
MIC301	1-542-572-11	MICROPHONE, ELECTRET CAP (Mic)			
SP301	1-825-645-11	SPEAKER (2.8cm)			
**********					
		ACCESSORIES			
		**********			
	1-823-519-31	CORD, CONNECTION (USB)			
	3-258-652-11	MANUAL (DVE2.2), INSTRUCTION (ENGLISH)			
	3-258-853-11	MANUAL, INSTRUCTION, MAIN (ENGLISH)			
	3-260-513-01	CASE, CARRYING			
	3-260-920-11	SOFT (CD-ROM), APPLICATION (Digital Voice Editor)			
	3-261-558-01	CARD, QUICK REFERENCE			
	8-954-008-92	RECEIVER, EAR MDR-E808LP			

MEMO

REVISION HISTORY

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Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003. 11	New